

A Framework for Action:

The State Regional Economic Development Strategy

January 29, 2009

State and Regional Profiles

Partnership

Reform

Results



Deval Patrick
Governor



Tim Murray
Lt. Governor



Daniel O'Connell
Secretary

Executive Office of Housing & Economic Development
COMMONWEALTH OF MASSACHUSETTS



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A Framework for Action is the product of an extensive review of plans and analyses prepared by public agencies and academic and private institutes along with interviews and meetings with municipal officials and staff, regional planning agencies, economic development experts, and business and academic leaders from throughout Massachusetts. The project team worked in close collaboration with state officials from throughout the Patrick-Murray Administration, particularly the Governor's Office and the Development Cabinet secretariats of Labor and Workforce Development, Energy and Environmental Affairs, Administration and Finance, and Transportation and Public Works.



Purpose of the Regional Economic Development Strategy

“I will ask municipalities to enter into a new partnership with state government, so that we can work together to reduce their operating costs, to better plan across regions, and to rebuild city and town centers into stronger economic cores.”

Governor Deval Patrick, Inaugural Address, Boston, January 4, 2007

“[W]e ... need to stop seeing our cities as the problem and start seeing them as the solution. Because strong cities are the building blocks of strong regions, and strong regions are essential for a strong America. That is the new metropolitan reality and we need a new strategy that reflects it.”

President Barack Obama, as candidate, speaking to the U.S. Conference of Mayors, Miami, June 21, 2008

MISSION

To develop a **framework** for state programs and investments in partnership with local and regional leaders that leads to **sustained economic growth** and **shared prosperity** throughout the Commonwealth.

TASKS

Identify assets, initiatives and investments that lead to realistic near-term and long-term economic growth throughout the Commonwealth.

Communicate a straightforward framework for the Patrick Administration’s economic development priorities.

Prioritize state investments and initiatives and promote meaningful collaboration with community, civic, business, municipal, and legislative leaders throughout the Commonwealth.



Massachusetts, A tradition of reinvention & renewal

A National Leader

Massachusetts is a dynamic and diverse state with a hardworking, entrepreneurial culture and a rich legacy of natural resources, educational excellence, civic leadership and historic contributions to the nation and the world. Today, Massachusetts is a leading exporter in the areas of the life sciences, advanced manufacturing, higher education, research & development, financial services and the creative arts. Massachusetts is home to one of the highest median household incomes in the United States and boasts some of the best public schools in the nation.

Massachusetts is a 21st Century success story. The evidence of our state's competitive strengths' grows each day. Recent studies by nationally renowned institutes regularly rank Massachusetts as a leading center of innovation, entrepreneurship and home to one of the most talented populations in the world.

Our state's unique capacity for reinvention and renewal has helped spawn new industries, as well as new movements in the arts and social advocacy. Massachusetts is proud to be a leader, whether in education reform, new technologies, or the acknowledgment of basic human rights. Massachusetts residents balance a profound respect for our historic heritage and traditions with the acknowledgement that we must adapt to new challenges and re-think how we grow shared prosperity in our communities and provide for services and infrastructure in the 21st Century. For nearly 400 years, the people of Massachusetts have reinvented our economy and re-imagined our common purpose many times and our state is profoundly enriched by the contributions that each generation makes during its moment of leadership.



Massachusetts, A tradition of reinvention & renewal

Economic Transitions, Regional Challenges

Massachusetts has a very strong and diverse economy, however, statewide numbers do not tell a complete story. A snapshot of the state's economy at any time from World War II to 1970 would have shown job opportunities with good incomes throughout Massachusetts. Regions like the Berkshires were major centers of manufacturing while the Cape and Islands were far more rural than today and had lower incomes. At its postwar height, Massachusetts was a thriving center for manufacturing, in traditional fields like textiles and furniture as well as new, knowledge-based sectors like information technology.

Nearly 40 years later, Greater Boston, including the metro-west region from Route 128 to Interstate 495, and high-tech centers in northeast Massachusetts, are major international centers of research & development, production and exports. The Cape and Islands have transformed into a comparatively prosperous region due to the growth of retirees and second-homeowners there. The decline of traditional manufacturing and the rise of the knowledge economy have disconnected many of the state's regions and their cities from the export-income and investment that is the life-blood of a thriving economy. The stark result has been lower incomes, less job growth and fewer opportunities in many of the state's regions compared to Greater Boston.

Today's challenge is to leverage our state's advantages and assets to bring prosperity to every region. Unlike many states, Massachusetts has a strong competitive advantage in its leading industries and unparalleled workforce. Massachusetts regions each have their own unique qualities and historic contributions to the state's economy and quality of life. The key to rebuilding a strong statewide economy is strategically and effectively leveraging all of the state's assets in a framework for regional reinvention and renewal. The Framework for Action is a strategy for regional prosperity.



Organization of Strategy

A FRAMEWORK FOR ACTION: The State Regional Economic Development Strategy

The State Regional Economic Development Strategy is laid out in three sections: the framework for regional development; the framework for action; and in-depth economic profiles of the Commonwealth and each region. While each region has its own peculiar trends, assets, and challenges, there are many common issues. The first two sections allow the state to apply a common framework for regional development and a common framework for action to each region in order to build sustainable and shared regional prosperity across the Commonwealth.

Section One: Framework for Regional Development

This section provides a theoretically-grounded, practical guide to the state's approach to regional development. The Framework for Regional Development is an empirically-grounded model for targeting state attention and investment to create regional prosperity.

Section Two: Framework for Action

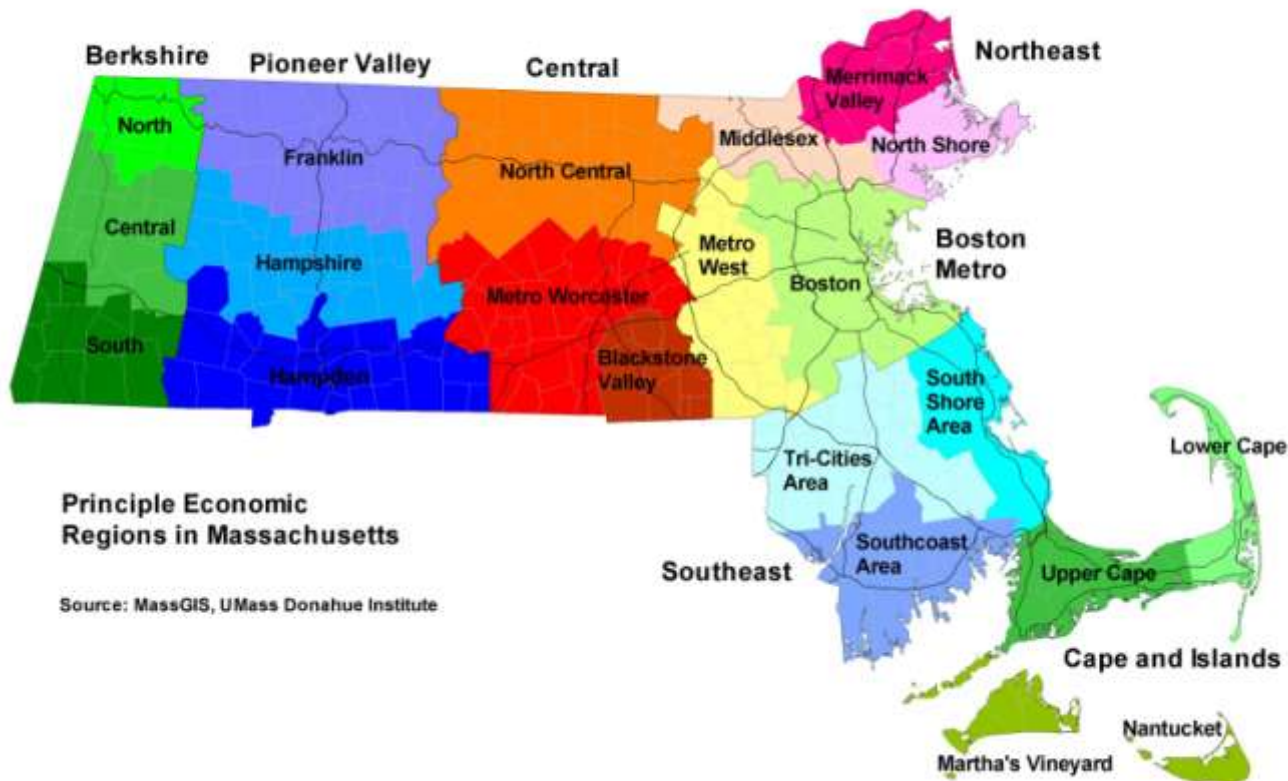
This section explains the approach to executing an action agenda. The Patrick-Murray Administration is committed to a **Partnership** approach to economic development that works with local, regional, and civic stakeholders and leverages federal and private resources and institutions to address the needs in each region. The state has and will continue to identify and execute **Reform** through this stakeholder partnership. And, finally, the Patrick-Murray Administration is committed to executing reforms, programs and investments that bring **Results**. This section will identify specific items for action to will build the foundations for new economic growth and prosperity across the Commonwealth.

Appendices: State and Regional Profiles & The State of the Massachusetts Housing Market

The Framework for Action is based on in-depth economic analysis of the state and its regions. The appendices include in-depth economic and housing market profiles of the Commonwealth and each of the seven MassBenchmark regions across the state. The profiles include maps of economic trends, important regional industrial sectors and key housing market conditions. The State of the Massachusetts Housing Market report is available at www.mass.gov/eohed.



Benchmark Regions and sub-regions



Berkshire

- North
- Central
- South

Boston Metro

- Boston
- MetroWest

Cape & Islands

- Upper Cape
- Lower Cape
- Islands

Central

- North Central
- Metro Worcester
- Blackstone Valley

Northeast

- Middlesex
- Merrimack Valley
- North Shore

Pioneer Valley

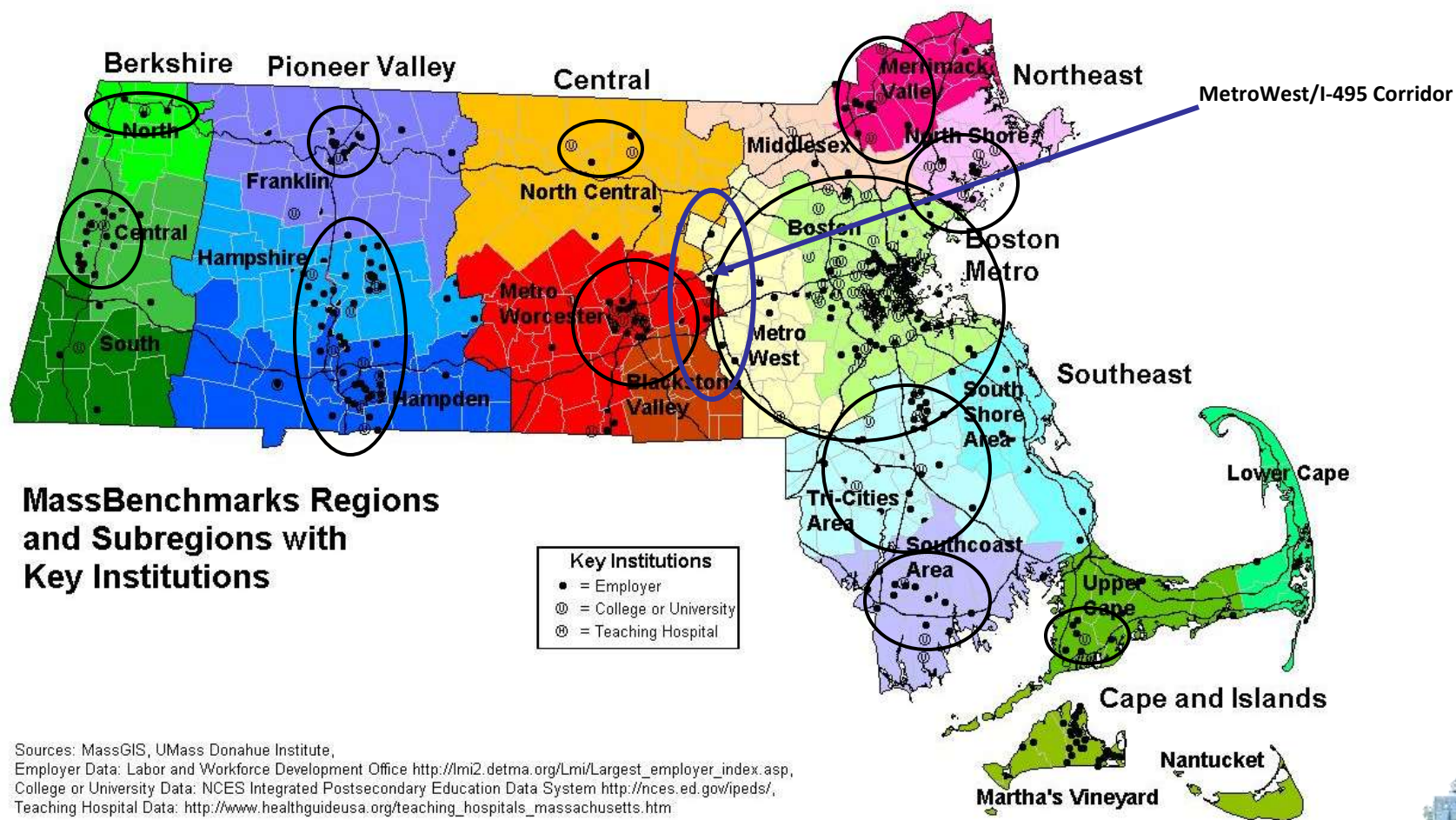
- Franklin
- Hampshire
- Hampden

Southeast

- South Shore Area
- Tri-Cities Area
- Southcoast Area



Representative Key Institutions, showing geographic concentrations



Framework for Regional Development

REGIONS MATTER

In the 21st Century, people live, work and recreate across town and often state borders. Regions are the scale in which housing, labor and job markets intersect, and improving the health of our regional economies is critical for individual opportunity and community development. Empirical research carried out over the past 10 years demonstrates that the prosperity of suburban communities is tied to the prosperity of their urban core, necessitating a regional approach to developing economic prosperity. The economic health of regions is tied to the economic health of their urban centers. Where cities are distressed, they will be an anchor to growing regional prosperity. Where they do well, they will lead regional economic growth.

FRAMEWORK FOR REGIONAL DEVELOPMENT

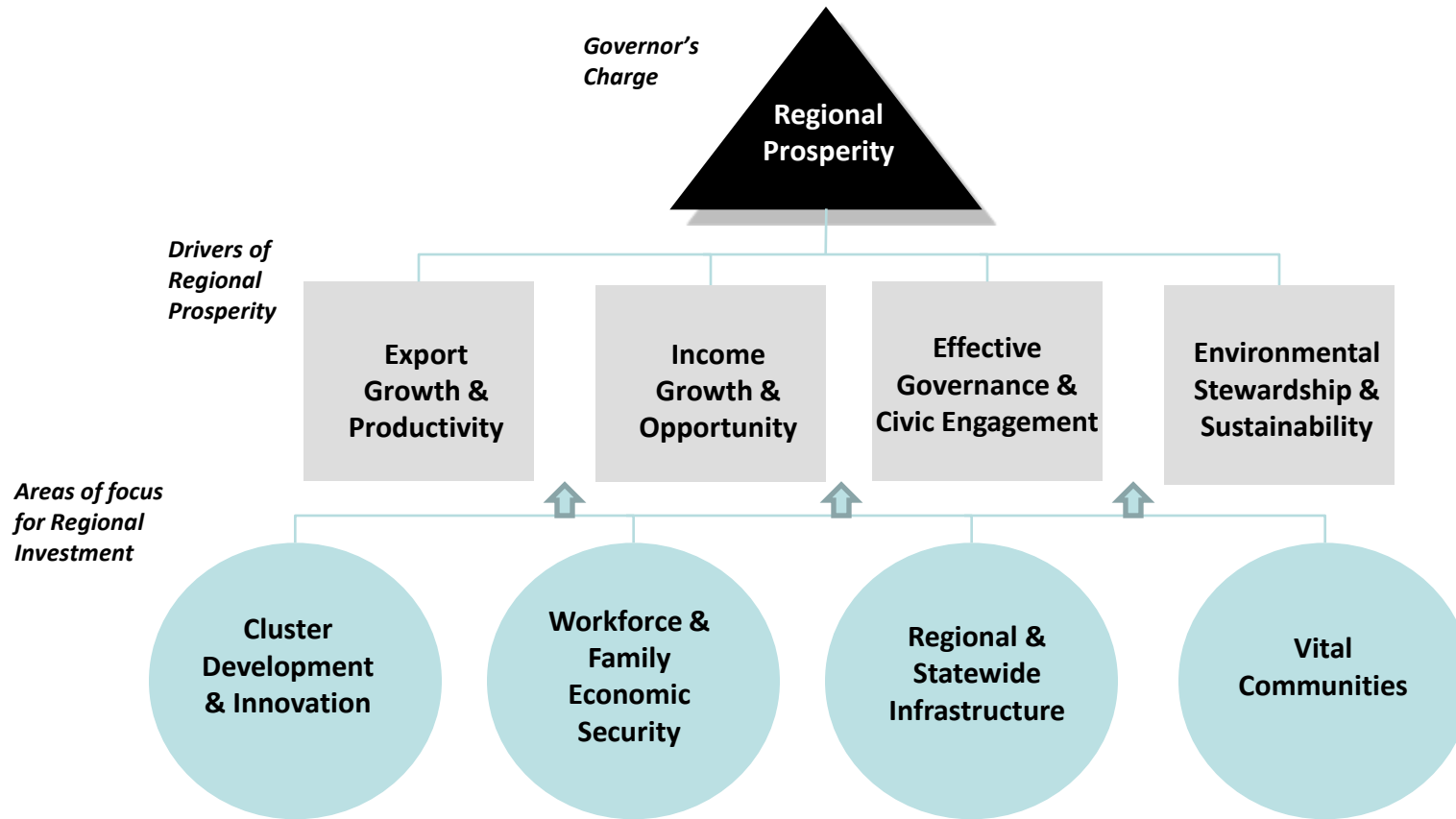
There are four foundational elements that are “drivers” for creating regional prosperity: Export growth and productivity; Income growth and opportunity; Effective governance and civic engagement; and Environmental stewardship and sustainability. Successful regions with sustained prosperity show evidence of these elements. The economic analysis conducted for this report, as well as the input of state and regional experts, led to clear conclusions regarding the main areas for the state to focus attention and investment to support regional prosperity: cluster development and innovation; workforce and family economic security; regional and statewide infrastructure; and vital communities. The chart on the following pages illustrates the Framework for Regional Development.

METHODOLOGICAL APPROACH

The Executive Office of Housing and Economic Development was charged by the Governor with developing a regional approach for shared prosperity. The project team reviewed regional plans and economic development documents & reports and analyzed the most recently available data on the state’s regional economic trends and conditions. This empirical approach was developed alongside (1) an overview of the theoretical literature that attempts to explain how regions grow and prosper and (2) interviews with local, regional and state officials in the seven MassBenchmarks regions throughout the Commonwealth. These different approaches – which neatly complemented each other – resulted in the Framework for Regional Development.



Framework for Regional Development



Adapted from "Dimensions of American Prosperity" Brookings Institution



Framework for Regional Development

Drivers of Regional Development

EXPORT GROWTH & PRODUCTIVITY

Regional prosperity primarily depends upon local production of competitive goods and services that bring net income into the region through exports. Exports can be manufactured goods, services, licensed intellectual property or income generating activities such as national and international tourism or education. Productivity gains lead to increases in net income and are necessary to maintain the sustainability of regional growth.

INCOME GROWTH & OPPORTUNITY

Dynamic regions offer opportunities for individual creativity, initiative and personal welfare. The sustainability of regional growth depends upon an expanding middle class and personal and professional mobility. Equity and opportunity are intrinsic public goods and they are also a catalyst for innovation, entrepreneurship, civic leadership and a labor market that is responsive to changes in employment needs.

EFFECTIVE GOVERNANCE & CIVIC ENGAGEMENT

The conditions for economic growth and investment are directly related to the capacity and credibility of governance institutions. Efficient, accessible and responsive public institutions build a sustainable platform for public confidence, civic participation and create effective vehicles for public/private partnerships.

ENVIRONMENTAL STEWARDSHIP & SUSTAINABILITY

Fostering proper environmental stewardship reflects the Commonwealth's values and history and provides essential quality-of-life amenities that attract and retain a workforce and economic activity. The sustainable use of resources and infrastructure affects long-term development capacity, the environment and the state's fiscal balance.



Framework for Regional Development

Areas of Focus for Regional Investment

CLUSTER DEVELOPMENT & INNOVATION

The Patrick-Murray Administration's policies and public/private initiatives are based on the identification of business and economic conditions, and the state's leading export clusters, particularly in high-growth, knowledge-sectors. Structural and institutional initiatives are developed in a collaborative fashion to sustain or build the long-term connection of high growth clusters within regions to state, national and global markets. Massachusetts' regional economies have a mixture of traditional industries, such as manufacturing, and emerging sectors, typically connected with Greater Boston's export strengths centered in the knowledge economy.

PATRICK-MURRAY ADMINISTRATION CLUSTER DEVELOPMENT INITIATIVES (Examples)

The Patrick-Murray Administration, in partnership with the Legislature, launched a 10 year, one billion dollar initiative through the Massachusetts Life Sciences Center (MLSC) to promote the life sciences within the Commonwealth of Massachusetts. The MLSC is tasked with investing in life sciences research and promoting economic development across the state and in hard to develop sub-sectors such as bio-manufacturing. MLSC initiatives include financial investments in public and private institutions growing life sciences research, development and commercialization as well as building ties between sectors of the Massachusetts life sciences community.

The Patrick-Murray Administration, through the Executive Office of Housing and Economic Development's Department of Business Development (DBD), supports the creation and retention of businesses in traditional and emerging business clusters. DBD is engaged in a range of activities, from outreach to business leaders through regular industry roundtables and events, to daily work at the Massachusetts Office of Business Development connects companies with state programs and incentives.



Framework for Regional Development

Areas of Focus for Regional Investment

WORKFORCE & FAMILY ECONOMIC SECURITY

Regional growth requires a sustained influx of workers, entrepreneurs and civic leaders to support the growth of industries and the supportive infrastructure that make regions function. Massachusetts' export growth industries are based in the knowledge economy: education and workforce training are the cornerstone of regional competitiveness. Residents of all ages need to prepare for life's costs – shelter, medical expenses, retirement – and chart a path for their ambitions and goals. Economic security, access to financial services and support, and educational and career opportunities are essential to participate in economic and civic life and they are integral to regional revitalization.

PATRICK-MURRAY ADMINISTRATION WORKFORCE INITIATIVES (Examples)

In 1993, the state embarked on an ambitious and largely successful program of education reform. In the fifteen years since, suburban schools have seen improvement, but many urban schools continue to struggle. The Patrick-Murray Administration has established the Readiness Project to fill in existing gaps from education reform and to address the serious needs of our urban schools.

The Executive Office of Labor and Workforce Development has developed the Regional Workforce Strategies Initiative, a statewide effort to build regional pipelines to prepare Massachusetts workers for high demand jobs. This initiative brings leaders in business, education, government, and workforce development together to develop concrete plans and partnerships to fill jobs that are in-demand in each region of the state.

Under the leadership of the Legislature and the Patrick-Murray Administration, the Asset Development Commission is preparing recommendations to reform existing regulations and expand programs and technical assistance to improve financial planning, economic security and asset-building for Massachusetts residents.



Framework for Regional Development

Areas of Focus for Regional Investment

REGIONAL & STATEWIDE INFRASTRUCTURE

Regional economies function through the transaction and movement of ideas, goods, services and people within and between regions. Economies rely upon predictable and sufficient goods and services to function at the level of the household, community and firm. The state shapes investment patterns and development through the provision of real infrastructure goods that improve productivity, connectivity and capacity. State and federal law similarly shape investment, land use and development decision-making through legal means and intermediary institutions.

PATRICK-MURRAY ADMINISTRATION INFRASTRUCTURE INITIATIVES (Examples)

The South Coast Rail project is a proposed rail connection from Boston to New Bedford and Fall River that would create significant mobility improvements and better link employment centers and residential locations. The project is foundational to regional economic development efforts in the Southeast region: efforts to improve educational outcomes, urban regeneration and export-oriented cluster development are the other elements that will make the rail investments worthwhile.

Broadband connectivity is the single most important economic development priority for Berkshire County, and many other towns in the Pioneer Valley, Cape Cod, Central Massachusetts and elsewhere. Akin to electricity, in-door plumbing and the telephone, it is impossible to understate the competitive disadvantage that people, businesses and municipalities confront in the absence of broadband internet service. Today, thanks to the Massachusetts Legislature and the leadership of Governor Patrick, the state has the new Massachusetts Broadband Institute, capitalized with \$40 million in bond-financed funds in its Broadband Incentive Fund.



Framework for Regional Development

Areas of Focus for Regional Investment

VITAL COMMUNITIES

Within the regional economies of Massachusetts, municipalities are at the heart of development decision-making, educational services and community and regional visioning. The Commonwealth's regions confront significant housing market and economic development challenges, with a scarcity of truly development-ready sites for business growth or housing that meets the demand of workers and residents. Cities and towns wrestle with a host of fiscal, environmental, transportation and other very real demands. The revitalization of regional economies in Massachusetts is dependent on a state-local partnership that provides capability and technical assistance to communities in exchange for reasonable efficiencies and support of regional priorities that are most likely to lead to sustainable regional prosperity.

PATRICK-MURRAY ADMINISTRATION VITAL COMMUNITIES INITIATIVES (Examples)

EOHED's Department of Housing and Community Development recently completed the Commonwealth's first statewide housing market assessment in over 20 years. The regional analysis and significant public input from municipalities and housing experts will form the basis of strategies tailored to the housing needs, across incomes, in each region of the state.

The Executive Office of Housing and Economic Development has created the Growth Districts Initiative to provide communities with technical assistance for significant new growth. Within identified growth districts, EOHED works with the community and property owners to make the district truly "development ready" with respect to local permitting, state permitting, site preparation (including brownfields remediation), infrastructure improvements, and marketing. The objective is to create a level of "development readiness" within each of these growth districts comparable to that now available at Devens, a location proven to be highly attractive to new development and to be truly competitive at a national and international level.



Guiding Principles of the Framework for Action

BUILD UPON EXISTING ASSETS

Vibrant, healthy regional economies connect institutions and assets in a strategic manner that leverages resources and shapes community visions into measurable actions. Strategic planning and investments that are likely to lead to sustainable growth are based on an understanding of key assets, institutions and capabilities – state and local – and the strategic cross-institutional collaborations and partnerships that foster a sustainable growth climate for industries and communities.

FOCUS ON THE FUNDAMENTALS

The critical challenge for Massachusetts is to rebuild the foundations for growth in the state's regions. The innovative and productive capabilities of Massachusetts' people and firms are best unleashed when their public partners focus on the fundamental components of healthy communities, regions and markets: vital communities; sufficient and reliable infrastructure; workforce and family economic security; and industry and innovation.

PLAN AHEAD

The goals of the strategy will be best achieved where local, regional and state partners make and implement long-term plans that promote these goals and address the needs of the community. The Administration coordinates economic investments and policies through the Development Cabinet and the state's quasi-public corporations. Whether at the state, regional or local level, the goal is to plan ahead together and execute plans together.

PARTNERSHIP, REFORM, RESULTS

The Patrick-Murray Administration is committed to a Partnership approach to economic development that works with local, regional, and civic stakeholders and leverages federal and private resources and institutions to address the needs in each region. The state is leading initiatives that will incorporate long-needed reforms at the state-level and incent the adoption of best-practices locally. The Patrick-Murray Administration is committed to achieving meaningful, timely results that build the foundation for economic growth and prosperity across the Commonwealth.



Cluster Development & Innovation

SUPPORT JOB GROWTH AND CLUSTER DEVELOPMENT IN EXPORT-ORIENTED INDUSTRIES

Regional prosperity is fundamentally-based on the income and opportunity for meaningful careers that is created through vital export-oriented industries. Massachusetts boasts competitive companies and world-class institutions in every region of the Commonwealth. The growth of globally-dominant export clusters in Massachusetts is highly-concentrated in eastern Massachusetts, from Andover to Metro-West to Boston. Still, examples of outstanding research, manufacturing, creativity and innovation exist in every corner of the state. The challenge for the Patrick-Murray Administration and its many partners in the private sector, higher education, municipal government and regional institutions is to continue to sustain and nurture the growth of important regional sectors, expand the global competitiveness of the state's dominant industries, and to ensure that the distribution of high-growth sectors is more evenly-distributed across the state.

Expanding the statewide reach of the Life Sciences Super Cluster, Information Technology sector, Creative Economy, Clean Energy Cluster, Financial Services and other leading sectors will benefit greatly from key investments identified elsewhere in the strategy: education and workforce development, community vitality and regional development capacity, enhanced mobility and investments in broadband and other infrastructure. In addition, the state's regional economies will benefit from targeted initiatives that are attuned to the specific barriers to development and opportunities for growth in the state's leading state and regional export industries.

The Patrick-Murray Administration is committed to partnering with the state's businesses, state and federal legislative leadership, regional leaders and leading institutions to enhance the state's competitiveness. Fortunately, through the far-sighted leadership of Massachusetts Legislature, civic and business leaders, the Patrick-Murray Administration and past Administrations, the state already has many of the tools it needs in place to succeed.



Cluster Development & Innovation

SUPPORT JOB GROWTH AND CLUSTER DEVELOPMENT IN EXPORT-ORIENTED INDUSTRIES

In 2008, the Legislature passed, in partnership with the Patrick-Murray Administration, the Life Sciences Act, Green Communities and Green Jobs Acts, and the state's Broadband Bill. Past Legislatures approved the state's expedited permitting act, Chapter 43D, created a state permitting ombudsman, and created industry and business support teams within the Massachusetts Office of Business Development to support the retention and creation of jobs.

As critically, past legislatures created and funded the development of the John Adams Innovation Institute (JAII) within the Massachusetts Technology Collaborative, and the Massachusetts Technology Transfer Center (MTTC) hosted by the University of Massachusetts. JAII and MTTC join the newly-expanded Massachusetts Life Sciences Center (MLSC) as essential intermediary institutions that build local capacity and seed cluster-development within Massachusetts' regional economies. The quasi-public institutions provide expertise that is attuned to best practices within industry and academia and has the capacity to respond to economic opportunities within Massachusetts regions at a pace that government often lacks.

The partnership of the state's leading state and regional economic development agencies, the Patrick-Murray Administration, and leading businesses and institutions throughout the state will lead to the identification of the most effective strategies to support and catalyze local development.



Cluster Development & Innovation Action Steps

SUPPORT JOB GROWTH AND CLUSTER DEVELOPMENT IN EXPORT-ORIENTED INDUSTRIES

Action Steps:

Near-term

Develop key initiatives and implementation strategies to support targeted clusters in the Life Sciences, Creative Economy, Information Technology, Manufacturing, Clean Energy and Financial Services sectors.

Develop specific action strategies to expand targeted industries, at the appropriate scale, to regions throughout the state. The MLSC's regional technology centers and other state centers of excellence should be a key component of the strategies. EOHED and MOBD can provide substantial support connecting businesses and other key stakeholders to the quasi-public corporations.

Improve coordination and alignment of resources at the state's quasi-public corporations.

Support recapitalization of the John Adams Innovation Institute and Massachusetts Technology Transfer Center.

Key Initiatives: Life Sciences, Clean Energy, Manufacturing, IT and Creative Economy.

Long-term

Support institution-building at the local level through mission-driven strategic planning and investments, supported by the state's industry and quasi-public corporations.

Work with the University of Massachusetts to support regionally-based development strategies that are aligned with research strengths and local industry.



Workforce & Family Economic Security

EDUCATION & WORKFORCE DEVELOPMENT

Massachusetts regional economies and some urban areas within Greater Boston have education and skill levels well-below the state average. Private investment and growth in the regional economies are dependent upon improvements in educational attainment, improved connections between growing sectors and occupations and workforce development programs, and more robust efforts to connect students and workers with employment opportunities through co-ops, internships and incentives for regional retention. Massachusetts' education and workforce challenges are most acute in the state's regional cities and concentrated attention must be paid to improving educational outcomes in these communities.

Action Steps:

1. EOHED will partner with the Executive Office of Education through the Governor's Readiness Cabinet to support efforts to improve educational attainment at the elementary and secondary education levels, particularly in urban areas. Education and training are and will be a centerpiece of the state's regional cities initiative;
2. EOHED will partner with the Executive Office of Labor and Workforce Development to improve connections between workforce development programs and businesses, and collaborate on targeted clusters, such as the Life Sciences, Manufacturing and Clean Energy to link state programs and incentives to high growth occupations;
3. EOHED will work with leaders from EOE, EOLWD, the Massachusetts Life Sciences Center and business and academic stakeholders to improve efforts to retain workers through co-ops, internships and regional marketing.



Workforce & Family Economic Security

FAMILY ECONOMIC SECURITY

Massachusetts residents of all ages need to prepare for life's costs – shelter, medical expenses, retirement – and chart a path for their ambitions and goals. The foreclosure crisis is an immediate challenge that requires the urgent response of the Patrick-Murray Administration, state and local partners and the state's leaders in Washington, DC. The crisis emphasizes the need for focused federal-state public/private partnerships to respond to needs for financial planning and services to support retirement planning, educational costs and other critical life needs. The state's recently completed Housing Market Assessment documented that the state greatly needs to expand housing opportunities for extremely-low-income residents.

Action Steps:

1. EOHED will continue taking steps to respond to the foreclosure crisis. Steps include statewide workshops, technical assistance and advocacy designed to keep people in their homes. The Office of Consumer Affairs and Business Regulation has strengthened rules to prevent mortgage fraud and worked with lenders to expand loan restructuring. The Department of Housing and Community Development has received substantial federal and state funding to implement the neighborhood stabilization program to acquire foreclosed properties;
2. EOHED will work with Legislative leaders and its partners in the private, nonprofit and philanthropic sectors to implement the forthcoming recommendations of the Asset Development Commission. The objectives of the Commission are to reform existing programs and regulation and launch new initiatives designed to improve financial planning and asset development for the state's residents;
3. The Patrick-Murray Administration will partner with academic leaders and financial experts to analyze and respond to the challenges Massachusetts residents confront financing educational costs and funding their retirements.



State & Regional Infrastructure

INFRASTRUCTURE: IMPROVE CONNECTIVITY AND MOBILITY

The first responsibility of the Commonwealth of Massachusetts is to ensure the safety and reliability of the state's transportation and public works. The daily commute from home to office along any of the state's most-congested highways provides a good example of how individual decisions about where to live, work or invest can collide to diminish quality of life and economic efficiency.

Massachusetts' network of roads, rail, ports and air facilities link markets for employment, goods and services, creating a backbone for commerce and civic connectivity between the regions of the state. Efficient, reliable and safe transportation infrastructure is essential for people, communities and businesses to connect to opportunities of all kinds.

Over the past 20 years, economic growth in the Commonwealth has been concentrated in areas highlighted by: a skilled workforce; strong companies and institutions based in emerging industries and technologies; excellent linkages to national and international markets; and developable land with sufficient transportation infrastructure. Overwhelmingly, economic development and household income growth has occurred along and inside the arc of Interstate 495, which includes Greater Boston and parts of Central, Southeastern and Northeastern Massachusetts. Though only one part of the story, the construction of major roadways, mass transit and airport improvements within eastern Massachusetts over the past 30 years has accelerated both land development (sprawl) and economic growth. The regions farthest from Metropolitan Boston have suffered the greatest declines in job growth and incomes.



State & Regional Infrastructure

INFRASTRUCTURE: IMPROVE CONNECTIVITY AND MOBILITY

Today, the challenge for Massachusetts is to maintain and improve the mobility and connectivity of people and businesses in the densely-developed communities of eastern Massachusetts, while making the kind of foundational investments in other regions that will improve intra-state mobility and link markets to national and international customers and investment partners. Balanced state growth – and the key investments that make that possible – is not merely a matter of equity: improving the efficiency and reliability of transportation networks throughout the state will improve the competitiveness of the state's businesses and people by expanding access to housing markets, workforce talent and investment opportunities.

The state's transportation finances and multiple administrative agencies are complex and the subject of a substantial reform effort by the Patrick-Murray Administration. The goal of the Framework for Action is to identify the primacy of transportation planning and investments to state and regional economic development. Each region of the state has unique challenges to improve intra-regional mobility while incorporating the principles of efficient, sustainable development. The state's regions also confront large-scale challenges to better link the region's businesses and populace to Northeast and New England, national and international markets. Enhanced air and rail connections are often promoted for their benefits for individual lifestyles or commuting options. In fact, these investments are far more critical to stimulate business-to-business transactions and direct investment.

The largest and most complex regional transportation needs, such as expanded regional and interstate passenger rail service, may require both patience and enhanced resources from the Federal Government. Inter-regional transportation planning efforts, such as the current corridor planning initiatives along Routes 128 and Interstate 290, require strategic focus, good analyses, and the cooperation of multiple stakeholders from nearby communities and the state. The state's transportation and mobility issues are challenging, but their steady resolution is a fundamental task of the state's regional economic development strategy.



State & Regional Infrastructure Action Steps

INFRASTRUCTURE: IMPROVE CONNECTIVITY AND MOBILITY

Action Steps:

The Executive Office of Housing and Economic Development will continue to work closely with the Executive Office of Transportation and Public Works on its state transportation plans for passenger and freight traffic. EOHD will provide input to the key economic development implications of transportation investments. Key opportunities include:

Intra-regional

1. Focus on corridor-planning initiatives in hot-spots, improve transportation demand mitigation efforts and shape development opportunities to alleviate congestion (Route 128, I-495, Route 7, Route 28, etc.);
2. Support economic development by implementing the Central Artery-Third Harbor Tunnel mitigations (Somerville extension, Fairmont Line);
3. Expand/improve public transit to reinforce development densities in existing job centers .

Inter-regional

1. Implement major inter-regional transportation improvements, including: South Coast Rail; Fitchburg Line improvements; Worcester Line improvements; CT/MA Commuter Line expansion to Springfield;
2. Support expanded Federal funding for inter-city high-speed passenger rail, including upgrades to the Acela service and evaluation of Boston-Worcester-Springfield High Speed Train;
3. Development of freight-related opportunities at inland and coastal ports;
4. Improve air connections to Westover Airport, reintroduced international service to Bradley Airport in Connecticut, and new direct-flight service to Logan Airport.



State & Regional Infrastructure

INFRASTRUCTURE: STATEWIDE INFRASTRUCTURE FOR THE NEXT 25 YEARS

In addition to transportation infrastructure or local infrastructure needs, the state's regions are critically affected by two major challenges that also hold the potential for great economic opportunity: broadband connectivity and the development of clean and reliable energy. Both challenges are the subject of major Patrick-Murray Administration initiatives and deserve the concerted effort and attention of state and regional stakeholders.

Broadband

Broadband connectivity is the single most important economic development priority for Berkshire County, and many other towns in the Pioneer Valley, Cape Cod, Central Massachusetts and elsewhere. Akin to electricity, indoor plumbing and the telephone, it is impossible to understate the competitive disadvantage that people, businesses and municipalities confront in the absence of broadband internet service.

Today, thanks to the Massachusetts Legislature and the leadership of Governor Patrick, the state has the new Massachusetts Broadband Institute, capitalized with \$40 million in bond-financed funds in its Broadband Incentive Fund. As stated by the Massachusetts Technology Collaborative, which is home to the MBI:

"The goal is to bridge the digital divide by investing in the construction of fiber, wireless towers and other critical and long-lived broadband infrastructure. Targeted state investments will attract and complement private sector investment, making it more cost effective for private providers to deliver complete solutions for customers in regions without broadband coverage."

The Patrick-Murray Administration has the expressed goal of extending broadband service to every un-served community in the Commonwealth by 2010.



State & Regional Infrastructure

INFRASTRUCTURE: STATEWIDE INFRASTRUCTURE FOR THE NEXT 25 YEARS

Energy

The development of green jobs and industries addresses state, national and international challenges of global warming, environmental degradation, increased energy costs and unreliable energy supply. Clean energy industries are predicted to be a high-growth sector in the coming decades, with significant demand for occupations across skill and income-levels. As home to many of the world's leading research institutions, engineers and scientist, Massachusetts is well-positioned to be a leader in clean energy research, products and services.

Akin to life sciences, clean energy discoveries are not only critical to the state's economy, they are essential to the economic health and functioning of the state itself. The Patrick-Murray Administration, through the leadership of Massachusetts Legislature and its Executive Office of Environmental Affairs, is implementing key initiatives to support the development and adoption of conservation measures and clean energy technologies.

- EOHED will partner with the Executive Office of Energy and Environmental Affairs and the Clean Energy Center to develop regionally-based cluster development strategies in clean energy sectors. The strategies will be based on local institutional-research and business strengths and reinforce collaboration statewide.

Though the state is making great strides in improving the reliability of energy supply and the predictability of pricing, many households and businesses confront significant challenges with increased energy costs, particularly in winter.

- EOHED will continue to advocate, with the Massachusetts Congressional Delegation, for increased funding for the Low-Income Heating Energy Assistance Program (LIHEAP) and to partner with the Executive Office of Energy and Environmental Affairs to support conservation efforts for businesses, municipalities and households. EOHED's Department of Housing and Community Development will advance 'best-in-nation' standards for sustainability in the state's public housing.



Vital Communities

CREATE VITAL COMMUNITIES AND REGIONS THROUGHOUT MASSACHUSETTS

Across Massachusetts, the state's regions and municipalities face common challenges: barriers to private sector investment development; sprawl that consumes natural resources and taxes infrastructure; a mismatch between available housing stock and household needs; strained municipal budgets; and a lack of tools and incentives to confront regional challenges at the appropriate scale. Reshaping planning and development practices in a manner that allows the public to address longstanding statewide needs while protecting community desires will be a challenge for all the institutions and stakeholders involved in making and implementing state and local laws. However, the sustainable growth of private investment and jobs, housing opportunities and the reduction in the state's carbon footprint, among other worthy objectives, requires a fundamental change in how we think about Massachusetts' regions and their needs.

For example, Massachusetts is generally recognized to have the most outdated and arcane zoning laws in the country, which provide serious obstacles to both efficient development and effective community planning. The result is too few housing units and too few appropriate places for businesses to grow. Another challenge is the outmoded and inefficient distribution of local services, particularly in the state's rural regions and fastest growing communities. Yet another challenge is matching the desire for private sector investment and growth with the appropriate – and genuinely development ready – sites that are well-attuned to regional advantages. None of these challenges can be solved overnight. None of these challenges can be solved by the state, municipalities or the private sector working alone.



Vital Communities

CREATE VITAL COMMUNITIES AND REGIONS THROUGHOUT MASSACHUSETTS

Agencies across state government support key investments in school facilities, cultural institutions, sidewalk and streetscapes, environmental protection and preservation and utilization of water and other essential resources. The state's sustainability principles and the Patrick-Murray Administration's understanding of local needs help to guide state actions on infrastructure and related development investments. Development decisions are coordinated at the agency-level and through the Governor's Development Cabinet, which brings together the Secretariats for Transportation, Labor and Workforce Development, Administration and Finance, Energy and Environmental Affairs, and Housing and Economic Development.

The sum of each region's infrastructure investments will greatly affect the pattern of economic growth and development in our regions and across the state. The municipalities and other leading regional institutions of the state should be encouraged to "think regionally" as they plan locally. The regional planning agencies and economic development councils of Massachusetts play a critical role, along with public officials and civic leadership, in helping regions to organize and plan effectively. As the state works in partnership with business, civic and municipal leaders across the state to enhance community vitality and 'development-readiness,' there must also be a strong commitment to communicate to the world the advantages of living, working and investing in Massachusetts.



Vital Communities Action Steps

REFORM STATE AND LOCAL POLICIES TO SUPPORT VITAL COMMUNITIES AND REGIONS

Action Steps:

1. Expand the use of inter-municipal agreements, regional infrastructure investments and other tools designed to create efficiencies and opportunities for cost-savings at the municipal and regional level;
2. Reform Chapter 40A to modernize the state's land use and zoning code to create new tools to facilitate greater local control of growth and greater consistency between local planning and regional and state needs;
3. Facilitate development-ready sites in places that desire growth through focused and strategic implementation of the Growth District Initiative, Chapter 43D streamlined permitting and pre-development support from MassDevelopment and MassHousing;
4. Improved coordination at the state level between the MPRO, MOBD, DHCD and other agencies as necessary to facilitate the focused implementation of planning and development initiatives by region, including adoption and use of the state's wide range of development tools. The Quasi-Public Corporation and Public Purpose Agency Council should be a forum for communicating and driving state and regional objectives;
5. The Patrick-Murray Administration will expand efforts to preserve affordable housing, rehabilitate existing units and expand future production;
6. Expand regional market-analysis & marketing with a public-private partnership through the state's "It's All Here" program.



Vital Communities

REVITALIZE AND RECONNECT OUR REGIONAL URBAN CENTERS

The fortunes of the Commonwealth are linked to the health and vitality of the regional cities as places to live, work and create. The state's regional cities are home to over 1.5 million residents of the Commonwealth and contain most of the state's colleges and universities, cultural institutions and large employers. After years of decline, the regional cities continue to be regional job centers and often the focus of a region's identity. The rebirth of the state's regional cities is essential if Massachusetts is to have vital regions with sufficient locations to grow, people to work and places to live.

Many of the state's regional cities are already engaged in local efforts to strengthen connections to the state's leading export industries: manufacturing firms have retooled; major life sciences facilities are planned for Lowell, Worcester, Springfield & Dartmouth; private investment is leading change in Haverhill & Lawrence; strategic planning and adoption of new state tools like 40R Smart Growth Districts and 43D Expedited Permitting sites are shaping potential development in New Bedford, Pittsfield, Holyoke and Fitchburg, and Brockton. The challenges of the regional cities are multiple and require coordination and partnerships in the areas of public safety, education, workforce development, planning and development, housing and best practices in municipal management. Long-term improvements in the regional cities will require the sustained commitment of a range of stakeholders – public and private – that firmly believe that regional prosperity – Massachusetts' welfare – is linked to opportunity and growth in our cities.



Vital Communities Action Steps

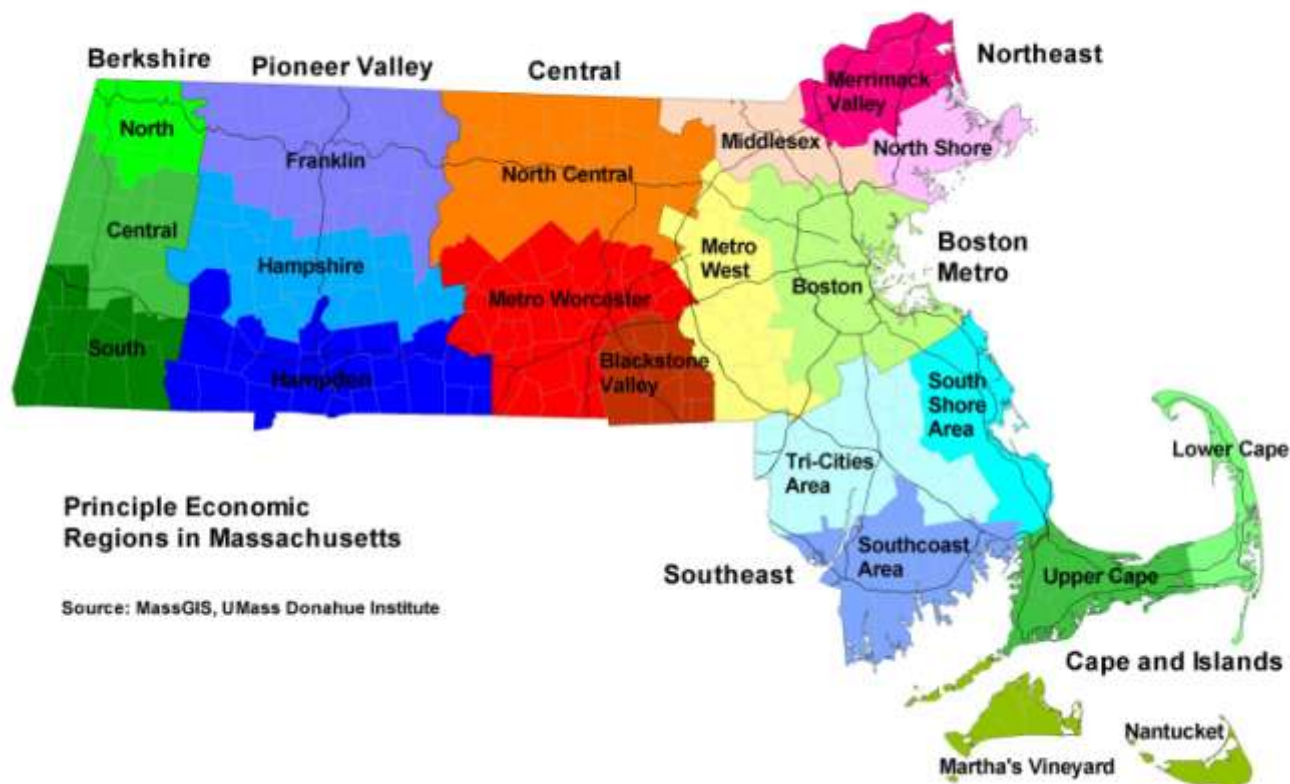
REVITALIZE AND RECONNECT OUR REGIONAL URBAN CENTERS

Action Steps:

1. Support strategic planning & neighborhood planning through the Gateway Action Grants, support from MassDevelopment, and coordination of EOHED staff in the economic regions;
2. Launch best practices initiative in urban redevelopment and city governance with Gateway Compact of Mayors, MassDevelopment, the UMass Boston Collins Institute and Administration personnel. The initiative should provide models for best practices in the use of DIF, EDIP, tax-title property programs and related redevelopment planning activities;
3. Reform the state's Economic Development Incentive Program by tightening approved uses and eligibility and more closely tying tax incentives to redevelopment/economic development objectives;
4. Emphasize workforce development and urban education initiatives in the Readiness Project, EOLWD's Regional Workforce Initiatives and work to link these high priority areas to cluster initiatives in EOHED;
5. Develop a program for market-rate housing and development incentives to be utilized within redevelopment areas: the financing tools should include enhanced capacity to utilize existing tools such as DIF, and new mechanisms, such as redevelopment tax credits;
6. Focus strategic partnerships with the Massachusetts Life Sciences Center, Clean Energy Center, John Adams Innovation Institute, the Massachusetts Cultural Council and UMass to create working strategies to seed near and long-term growth in identified emerging clusters by region and regional city. Particular opportunities should be focused on the Life Sciences, Clean Energy, Creative Economy and Manufacturing.



State and Regional Profiles



Berkshire

- North
- Central
- South

Boston Metro

- Boston
- MetroWest

Cape & Islands

- Upper Cape
- Lower Cape
- Islands

Central

- North Central
- Metro Worcester
- Blackstone Valley

Northeast

- Middlesex
- Merrimack Valley
- North Shore

Pioneer Valley

- Franklin
- Hampshire
- Hampden

Southeast

- South Shore Area
- Tri-Cities Area
- Southcoast Area



Snapshot for Massachusetts

ANALYSIS, State Economy

Massachusetts has a strong and diverse economy. Recent growth in knowledge-intensive sectors has been strong, but overall employment growth is modest. Export and high value-added industries grew between 2004 and 2007, with notable job gains in Education, Healthcare and Professional and Technical Services, which include the Life Sciences. Despite notable export-oriented growth, the greatest employment growth between 2001 and 2007 was related to construction, real estate and retail activity – which is not part of the export economy and has been affected by the recent housing and financial downturn. The biggest job losses over the past six years occurred in the period between 2001 and 2004. Since 2004 employment has generally rebounded, and some industries have grown noticeably between 2006 and 2007. As will be shown in the regional profiles, employment growth is unevenly distributed across the Commonwealth, negatively impacting incomes and job opportunities.



Snapshot for Massachusetts

LARGEST EMPLOYMENT SECTORS, 2007

- Healthcare, representing 15% of state employment.
- Professional & Technical Services, representing 11% of state employment.
- Retail, representing 11% of state employment.
- Education, representing just under 10% of state employment.

EMPLOYMENT TRENDS, 2001-2007

Most sectors saw decline between 2001 and 2004, but began recovering between 2004 and 2006, with additional growth in 2007.

Trends in Export-oriented Industries:

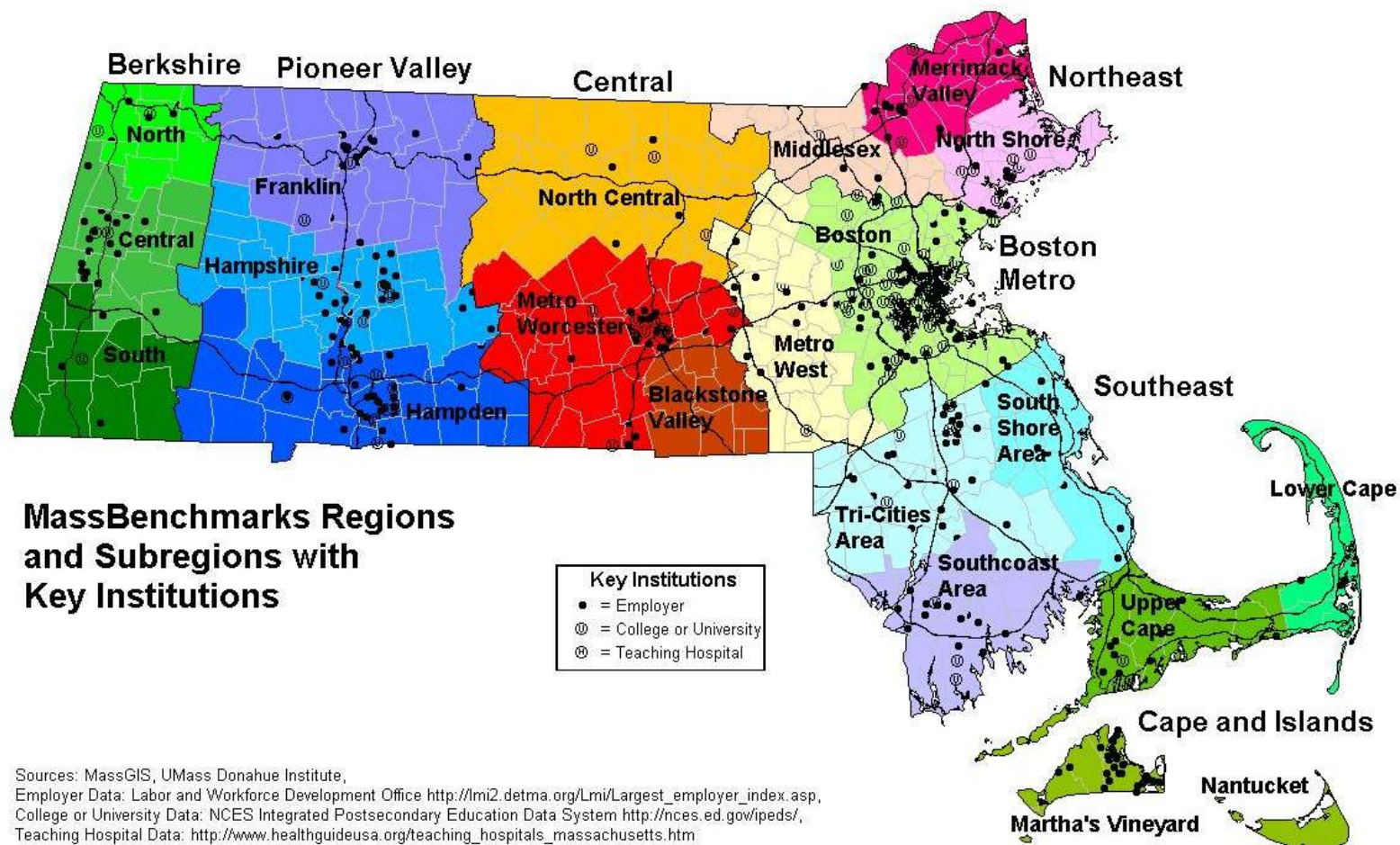
- Healthcare shows the strongest growth at nearly 14%.
- Manufacturing is generally in decline, losing over 24%.
- IT declined almost as strongly as Manufacturing, but unlike Manufacturing it has grown between 2006 and 2007.

Trends in Locally-serving Industries:

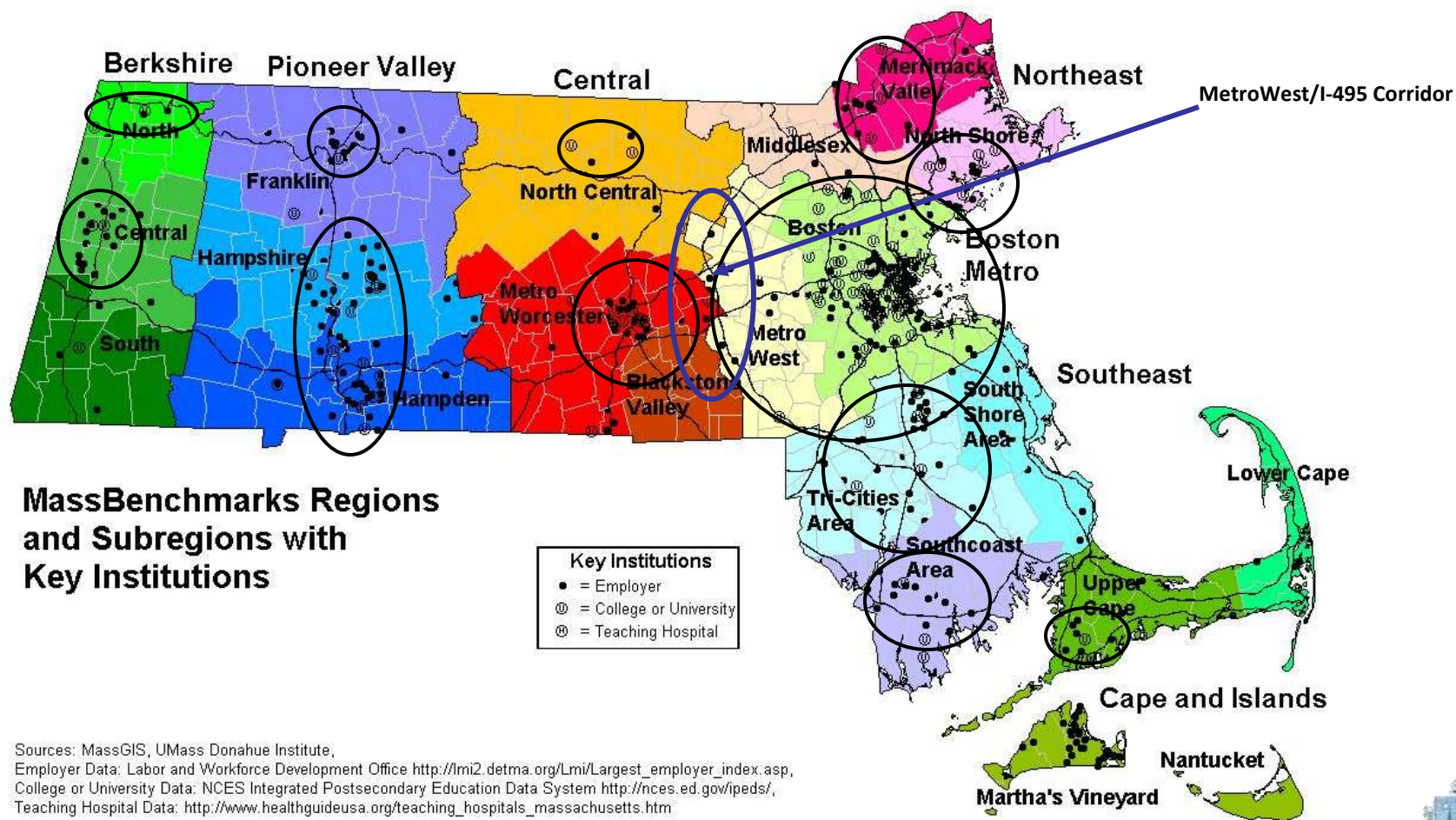
- Healthcare grew at 14%
- Construction grew at just over 2%, but slowed from 2006 to 2007
- Some sectors that grew between 2001 and 2004, such as Real Estate, declined between 2004 and 2007.



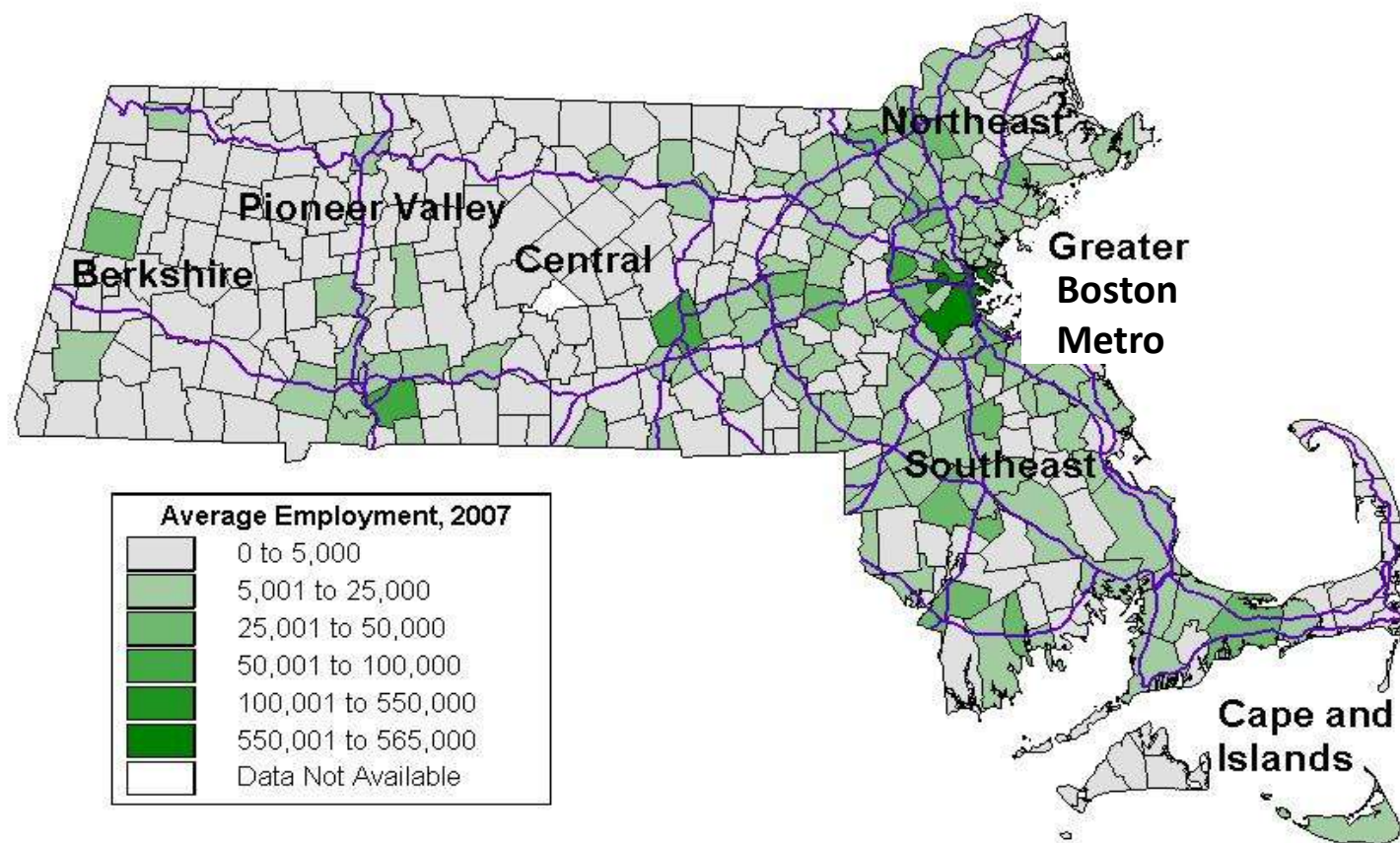
Representative Key Institutions



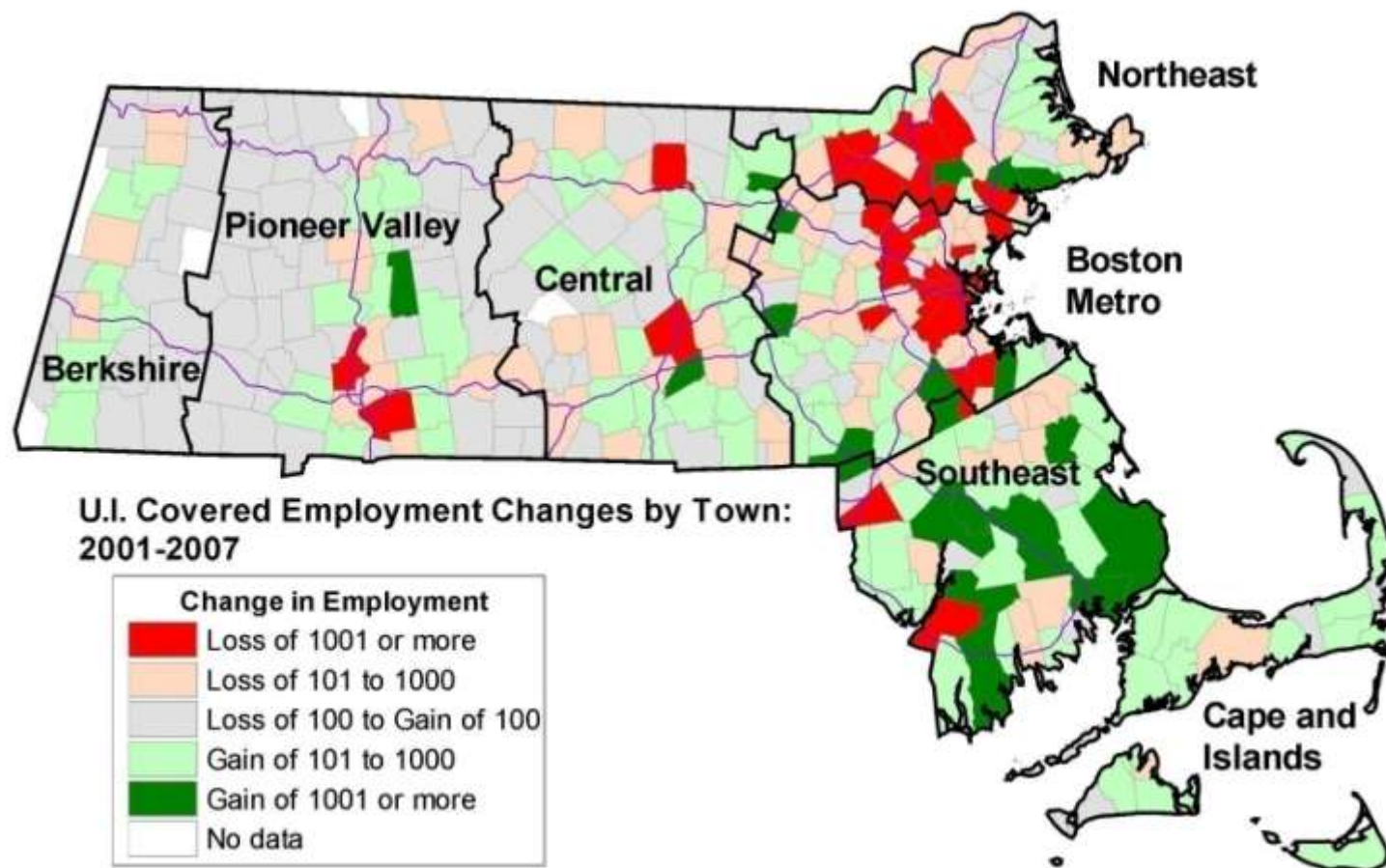
Representative Key Institutions, are concentrated along major transportation corridors and in traditional urban centers



Employment is concentrated in traditional job centers in the cities and suburban communities.



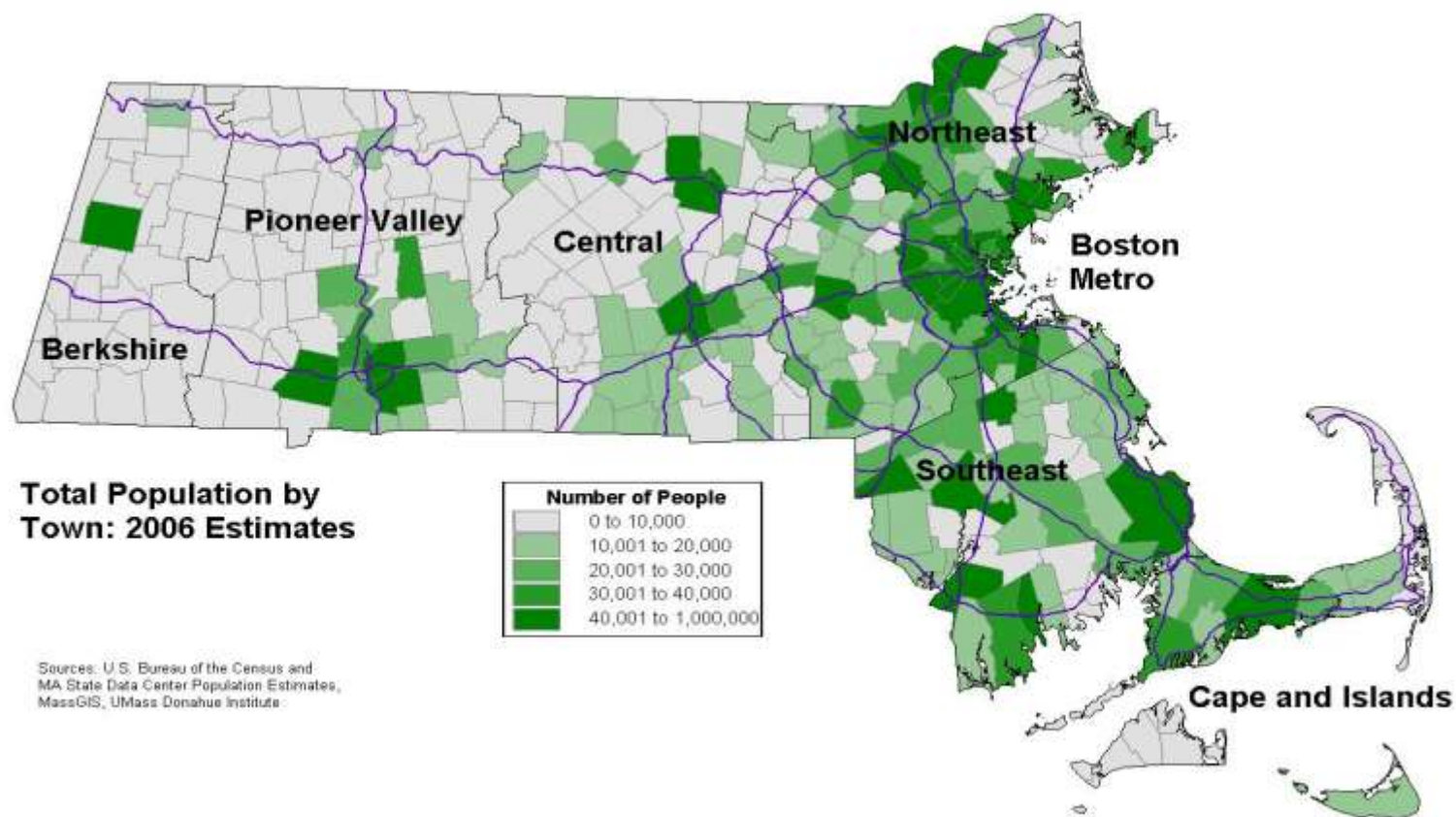
Employment growth in the 2000s has concentrated in suburban and rural areas with fast growing populations.



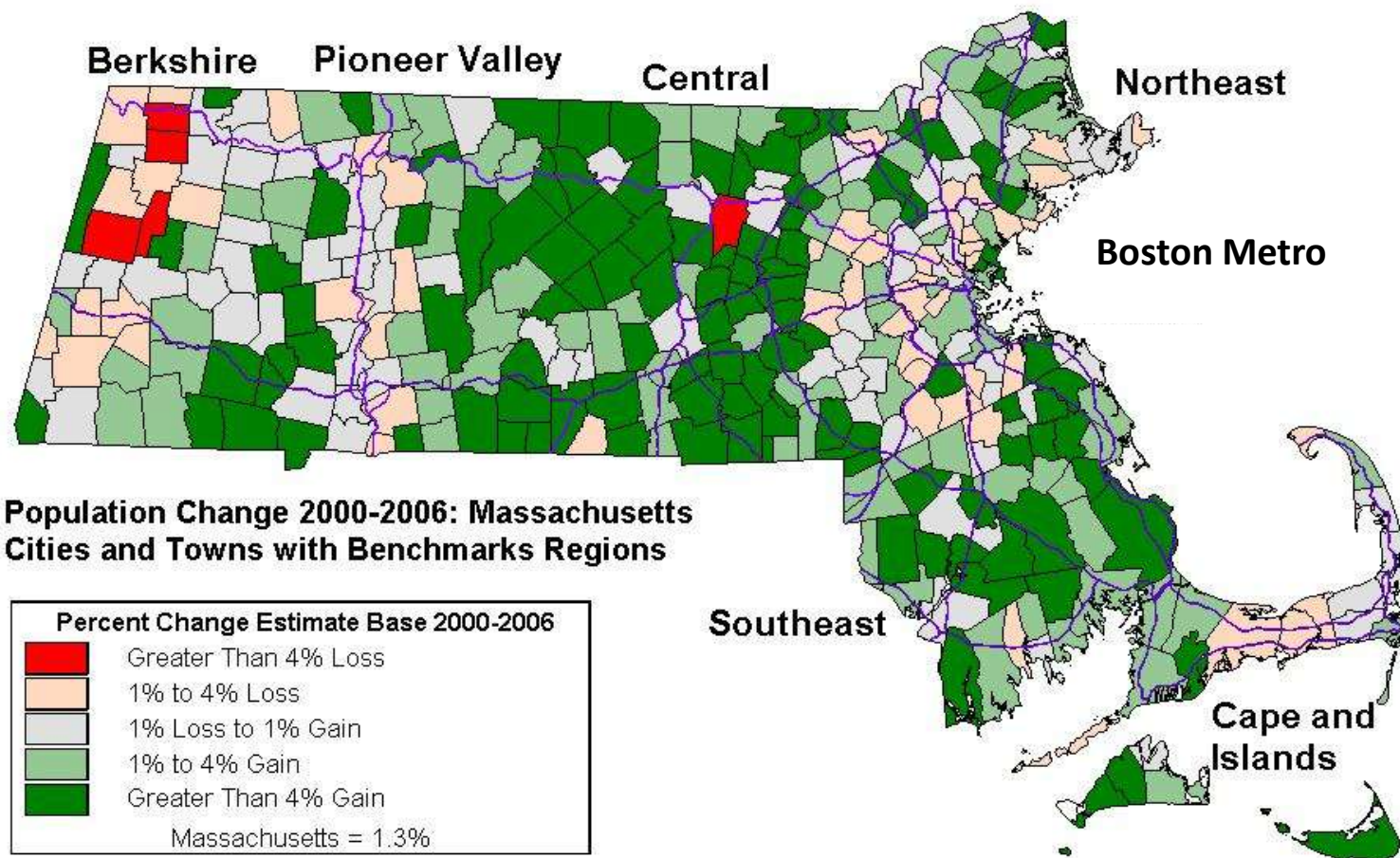
Sources: Massachusetts Executive Office of Labor and Workforce Development ES-202 Data: 2001-2007; MassGIS; UMass Donahue Institute



Population in Massachusetts is concentrated in traditional urban centers and suburban communities with good transportation access.



Population growth in the 2000s was concentrated in lower cost towns within commuting distance to major employment centers.



Housing Affordability remains a major challenge for Massachusetts despite the recent decline in housing prices and sales.

HOUSING TRENDS, 2000-2006

Massachusetts has 2,448,878 households in 2006, which represents a 0.2% increase from 2000.

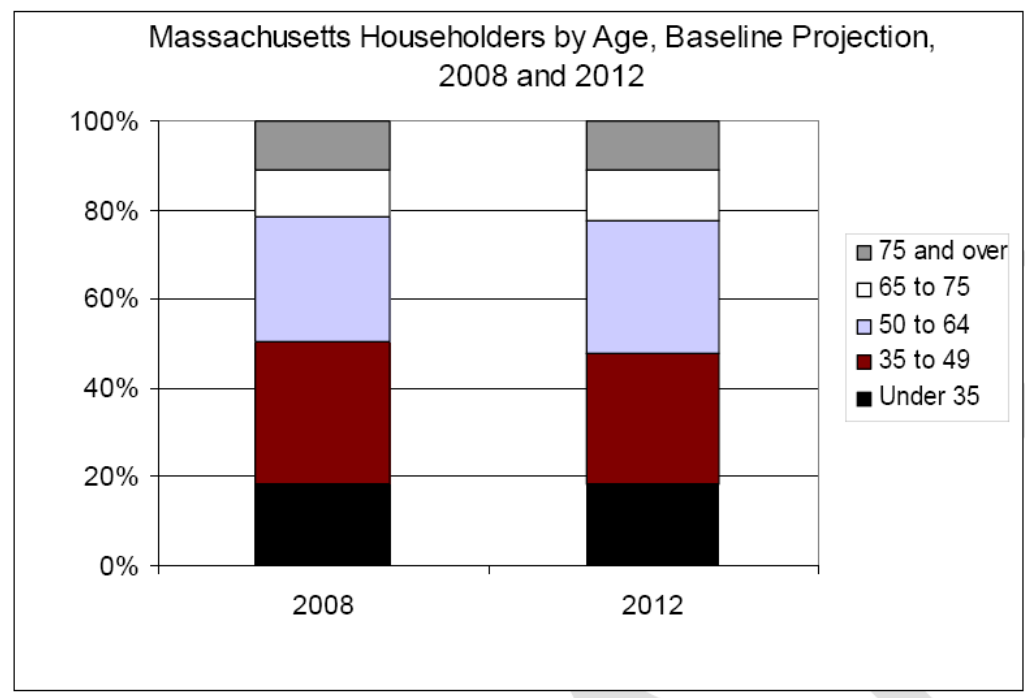
Massachusetts had a homeownership rate of 64% in 2005/2006

There was a 4.6% increase in homeownership and a 6.8% decline in renters.

Family Households – 32.4% of all households in 2005/2006, a 0.2% increase since 2000.

Foreclosures petitions rose from 8,372 in 2003 to 29,859 in 2007.

Share of Massachusetts Householders by Age, 2008 and 2012

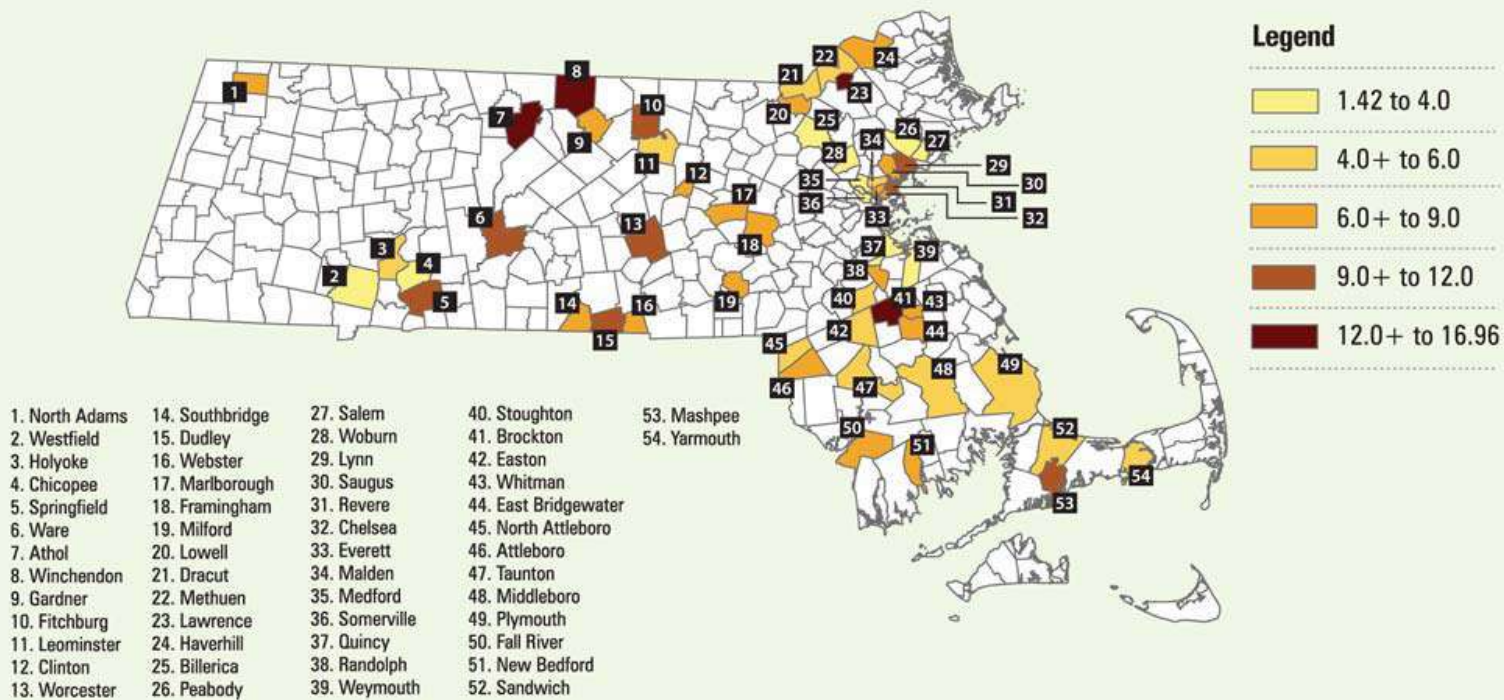


Source: New England Economic Partnership; U.S. Census. Chart created by UMass Donahue Institute.



Foreclosures remain a serious problem for households and communities throughout Massachusetts.

Figure 8. Number of Foreclosures per 10,000 Population, January - March 2008



Source: MassBenchmarks, vol.8, issue 2, 2008.



Common Trends across Regions

Trends and Analysis

- Healthcare and Education are bedrock sectors for Massachusetts that have been more resistant than other sectors to business cycles. Those sectors and Information Technology have all grown since 2006.
- Manufacturing suffered serious decline nearly everywhere, yet remained a major employment sector across the state. The overall decline in Manufacturing masks some bright spots within competitive sub-sectors, such as precision manufacturing. A challenge for the state is finding ways to support competitive sub-sectors and extending high-technology manufacturing within growth clusters, such as the Life Sciences and Clean Energy.
- Construction and industries related to homebuilding or remodeling were the fastest growing employers between 2000 and 2006. Since 2006, construction employment has declined substantially due to the housing market crisis.
- Food Services & Drinking Places and Amusements grew in most regions of the state, providing supportive services to growing residential populations; the decline in consumption related to the economic slump has significantly reduced employment in this sector.



Innovative Capacity in Massachusetts is concentrated in Boston Metro, followed by the Northeast and Central regions.

SBIR FUNDING, 2006

	Phase 1			Phase 2		
Region	Number of Awards	Value of Awards	% of MA Value	Number of Awards	Value of Awards	% of MA Value
Berkshire	0	0	0.00%	1	\$747,209	0.40%
Boston Metro	343	\$35,744,640	68.21%	170	\$132,532,488	70.13%
Cape & Islands	2	\$199,671	0.38%	4	\$2,380,504	1.26%
Central	25	\$5,261,574	10.04%	16	\$18,877,681	9.99%
Northeast	93	\$10,491,149	20.02%	43	\$31,126,932	16.47%
Pioneer Valley	3	\$264,989	0.51%	2	\$1,037,275	0.55%
Southeast	5	\$439,242	0.84%	3	\$2,290,870	1.21%
MA Total	471	\$52,401,265	100.00%	239	\$188,992,958	100.00%

Source: SBIR Past Awards Database, Massachusetts 2006.



Venture Capital

Investment is concentrated in Boston Metro, followed by the Northeast and Central regions.

Region	Amount	% of State Total	Largest Industries	% of Region Total
All MA	\$3,608,152,200	100.00%	Biotech	25.64%
			Software	22.31%
Berkshire	\$8,100,000	0.22%	Software	100.00%
			--	--
Boston Metro	\$2,870,786,400	79.56%	Biotech	31.10%
			Software	23.00%
Cape & Islands *	--	0.00%	--	--
			--	--
Central	\$130,596,300	3.62%	Software	60.00%
			Electronics/Instrumentation	28.71%
Northeast	\$524,025,700	14.52%	Medical Devices and Equipment	22.72%
			Semiconductors	15.21%
Pioneer Valley	\$4,000,000	0.11%	Software	100.00%
			--	--
Southeast	\$70,643,800	1.96%	Medical Devices and Equipment	55.87%
			Retailing/Distribution	33.97%

Source: PriceWaterhouseCoopers MoneyTree Survey; Calculations by UMass Donahue Institute, 2008.



NIH Funding is overwhelmingly concentrated in Boston Metro,
with nationally competitive levels of awards to the Central region.

Benchmark Region	Awards	Total Value of Awards	Organizations	Top Organization (by Award Value)	Award Value of Top Organization
MA	5208	\$2,204,284,140	191	Massachusetts General Hospital	\$293,259,960
Berkshires	3	\$393,387	1	Williams College	\$393,387
Boston Metro	4715	\$2,030,334,063	149	Massachusetts General Hospital	\$293,259,960
Cape & Islands	25	\$6,716,688	4	Marine Biological Laboratory	\$5,721,833
Central	340	\$123,679,697	14	UMass Medical School	\$107,859,776
Northeast	39	\$22,512,905	16	Agencourt Bioscience Corporation	\$11,528,372
Pioneer Valley	82	\$19,692,026	4	University of Massachusetts Amherst	\$17,914,891
Southeast	4	\$955,374	3	Bock to the Future, Inc.	\$487,714

Source: NIH Awards Database, 2006; compiled by Donahue Institute, 2008.



UMass R&D Expenditures are concentrated in Worcester and Amherst, with impressive growth in Dartmouth.

Campus	Region	2000	2001	2002	2003	2004	2005	Growth 00-05
ALL	Statewide	\$232,791,000	\$251,013,000	\$293,039,000	\$317,387,000	\$345,575,000	\$365,288,000	56.92%
Worcester	Central	\$97,587,000	\$111,221,000	\$132,729,000	\$148,823,000	\$169,090,000	\$176,349,000	80.71%
Amherst	Pioneer Valley	\$96,907,000	\$97,976,000	\$109,332,000	\$113,512,000	\$120,788,000	\$127,487,000	31.56%
Lowell	Northeast	\$19,334,000	\$20,656,000	\$22,827,000	\$22,783,000	\$22,163,000	\$23,852,000	23.37%
Dartmouth	Southeast	\$6,905,000	\$9,488,000	\$15,030,000	\$16,746,000	\$18,074,000	\$19,452,000	181.71%
Boston	Boston Metro	\$12,058,000	\$11,672,000	\$13,121,000	\$15,793,000	\$15,460,000	\$18,148,000	50.51%

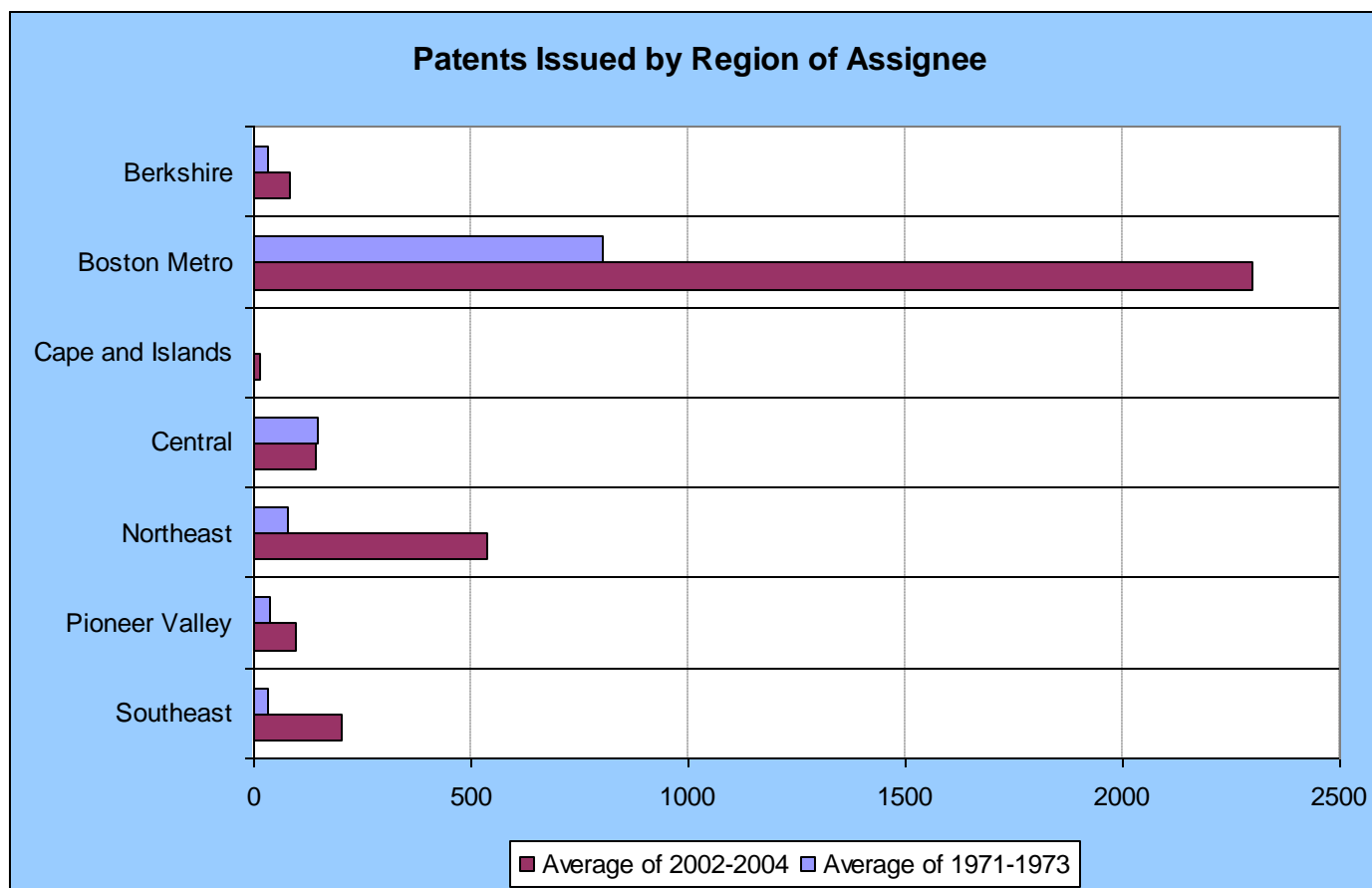
Note: **Bolded black** denotes highest value in the category. **Bolded red** denotes lowest value in the category.

Source: University of Massachusetts Annual R&D Expenditures FY 2006.



Innovative Capacity as reflected in patent awards is overwhelmingly concentrated in Boston Metro and Northeast.

PATENTS, 1973-2004

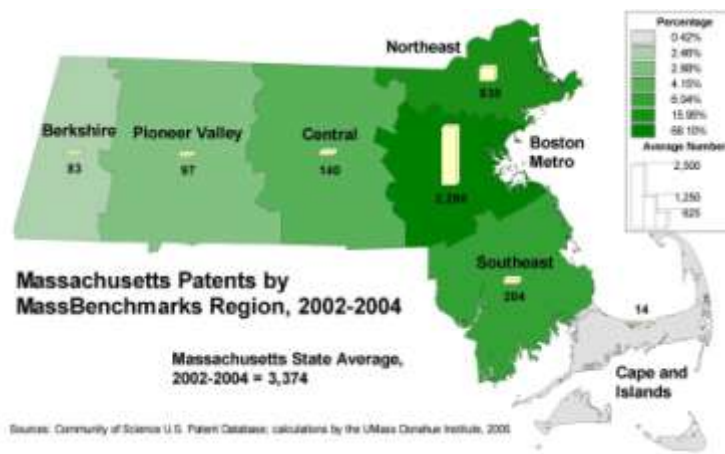
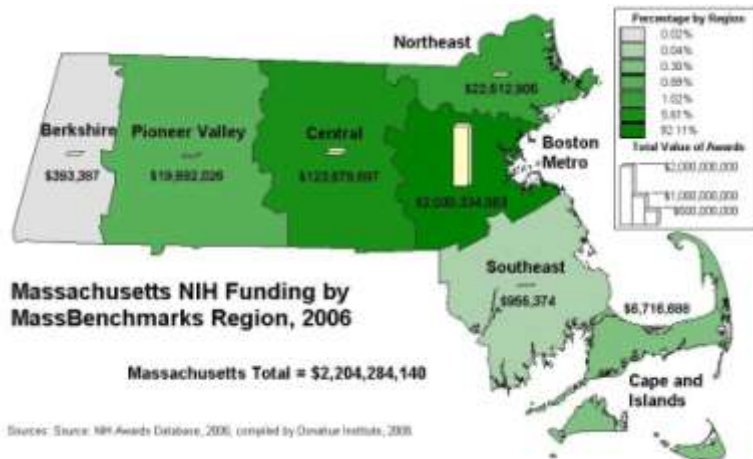


Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.

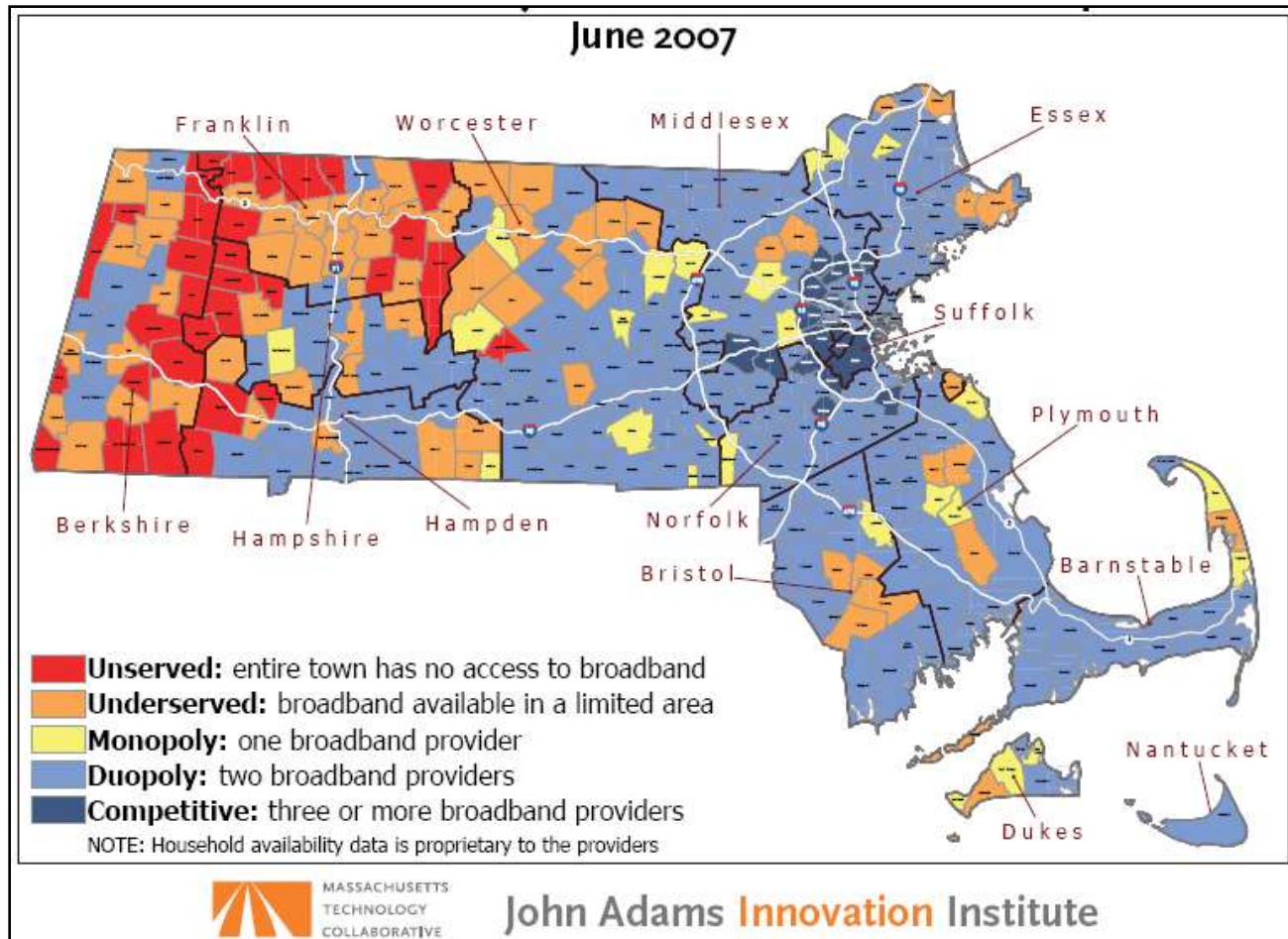


Innovative Capacity is concentrated in Boston Metro and drives employment and population growth in the state.

Section Three
State & Regional
Profiles:
Massachusetts

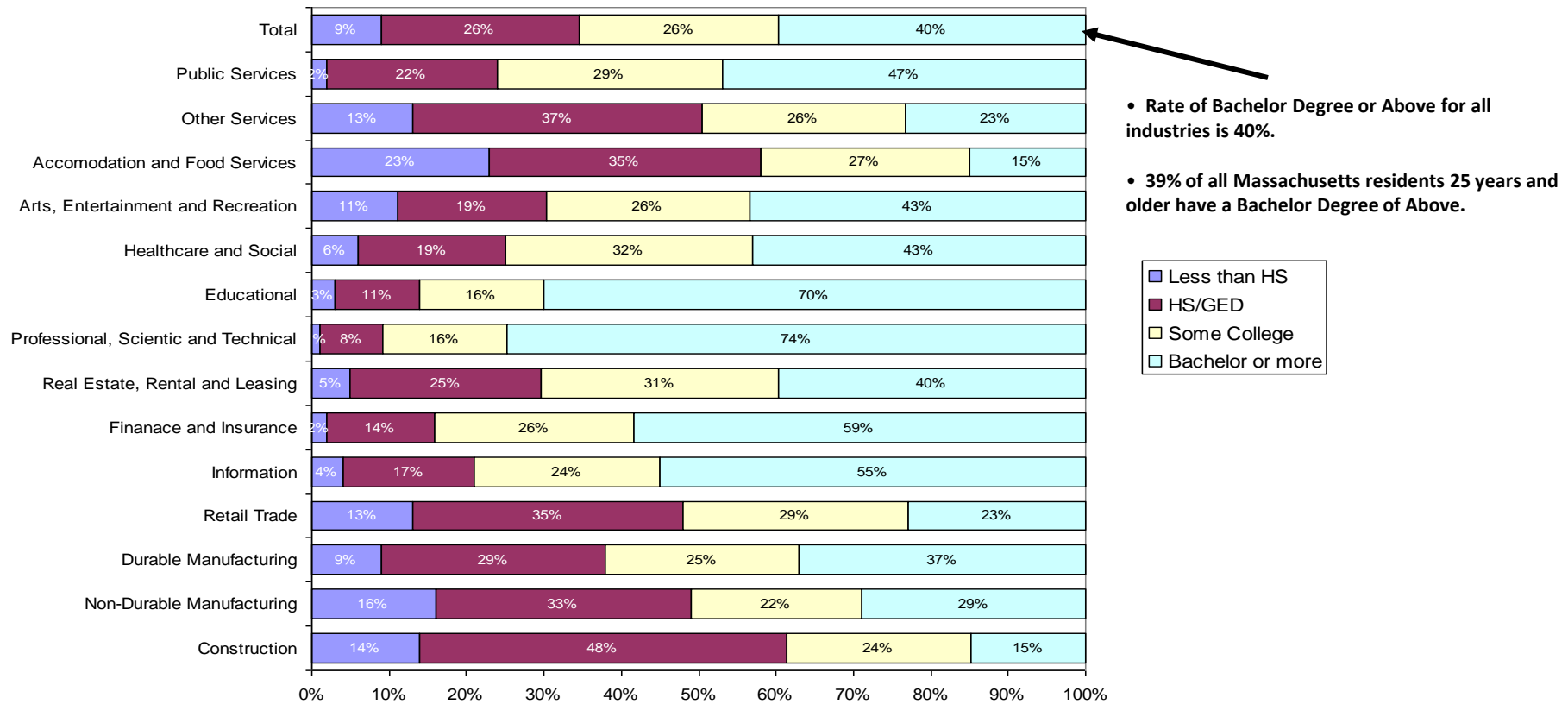


Broadband access is critical for economic development, especially in Western Massachusetts & the Cape and Islands.



Higher Educational Attainments are required in export oriented growth sectors in Massachusetts.

STATE-WIDE DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



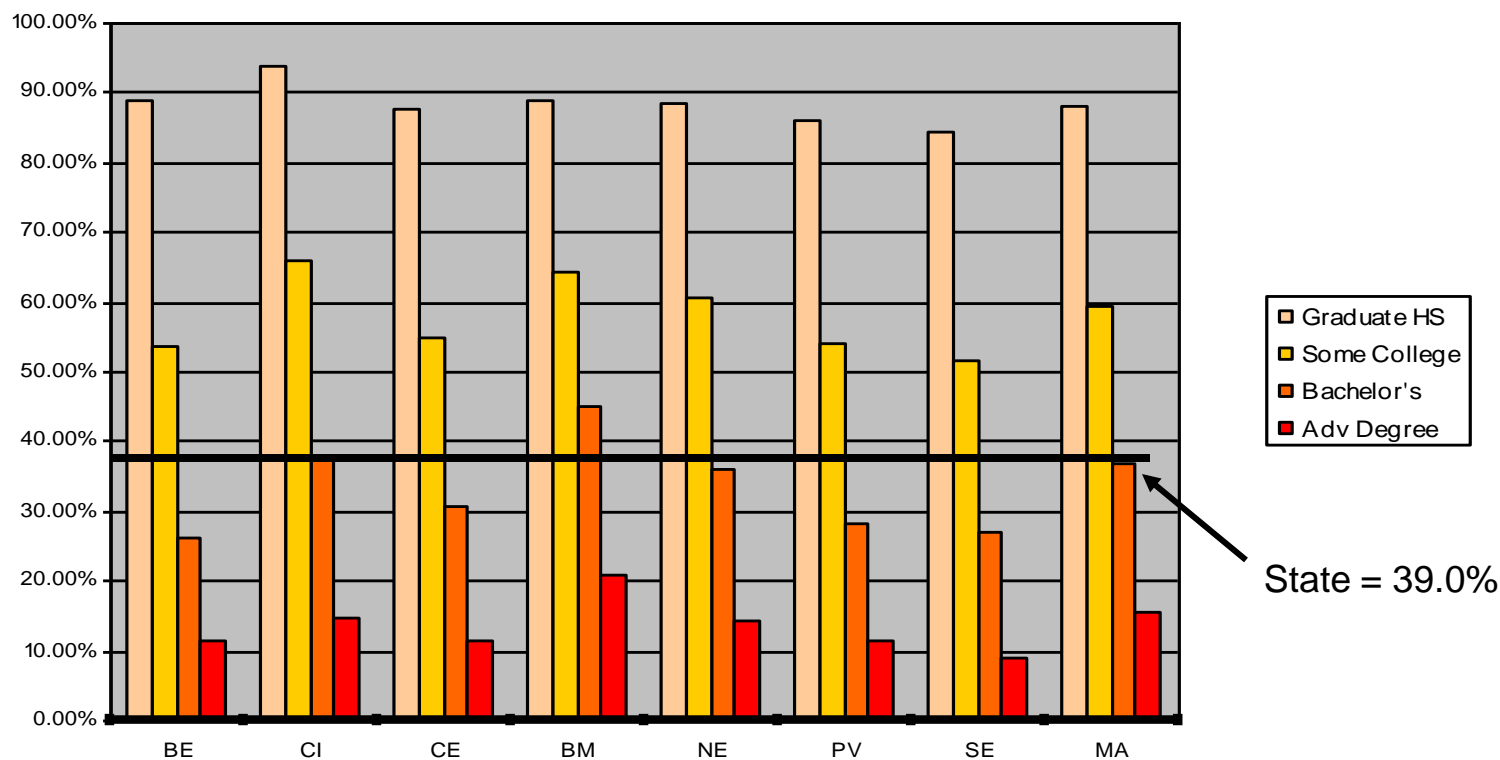
Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Educational Attainment

varies considerably by region and in many regions does not match the skills requirements of high growth sectors.

EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006



Source: U.S. Census 2006 American Community Survey, PUMS.



Growing Inequality:

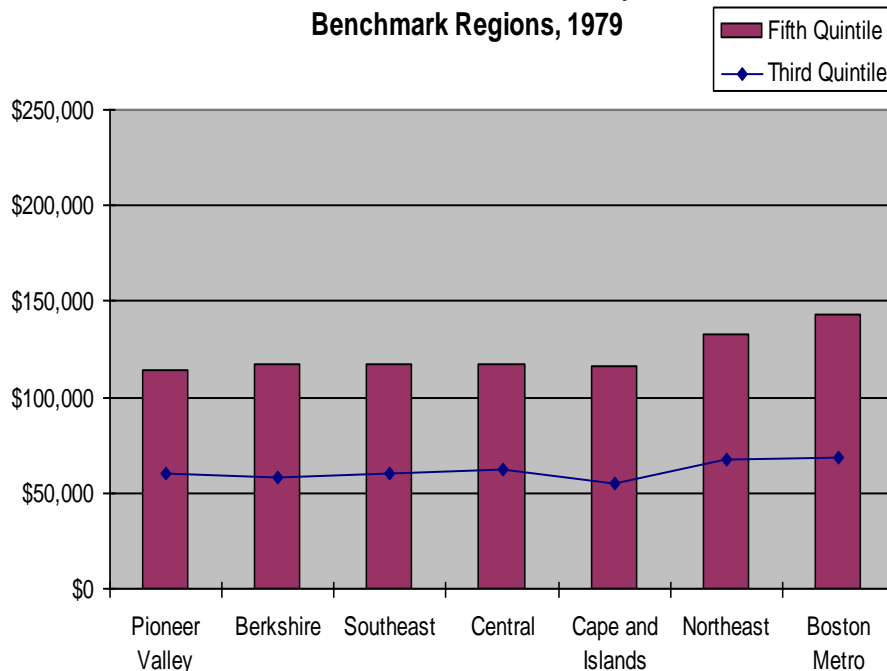
in 1979 incomes were far more equal across Massachusetts regions.

Section Three

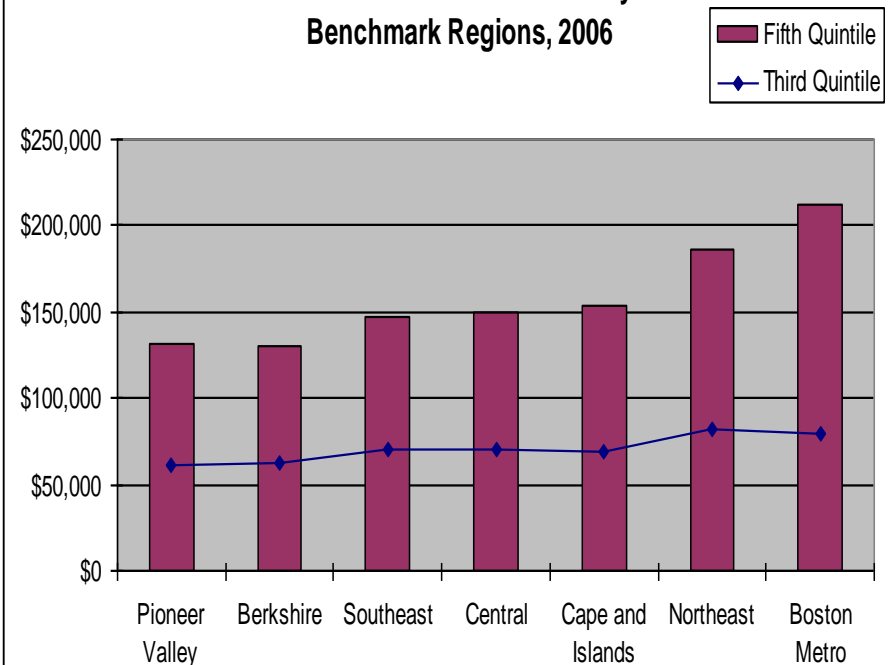
State & Regional Profiles:

Massachusetts

Median of Third and Fifth Quintiles of Family Income Across Benchmark Regions, 1979



Median of Third and Fifth Quintiles of Family Income Across Benchmark Regions, 2006

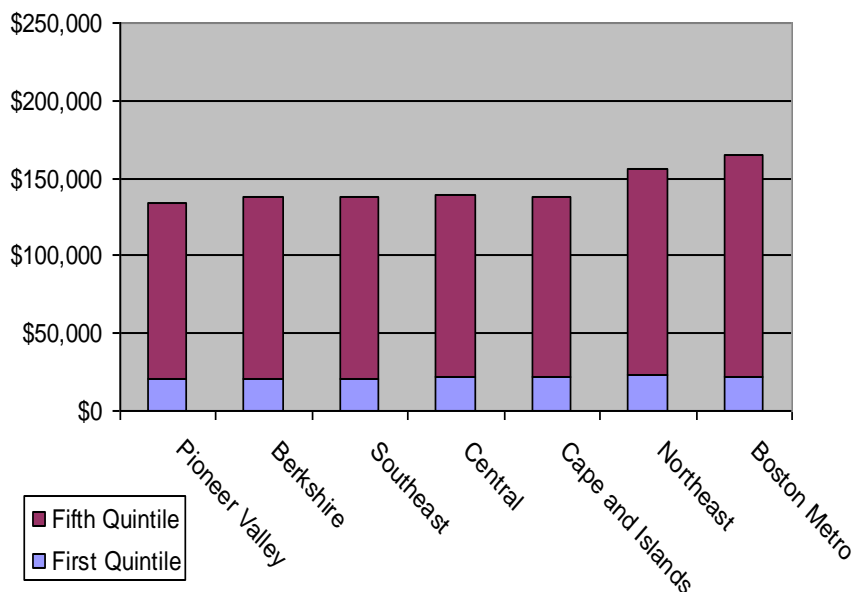


Sources: Decennial Censuses in 1980, 1990, and 2000, and American Community Surveys in 2005 and 2006. Figures are in 2006 Dollars.

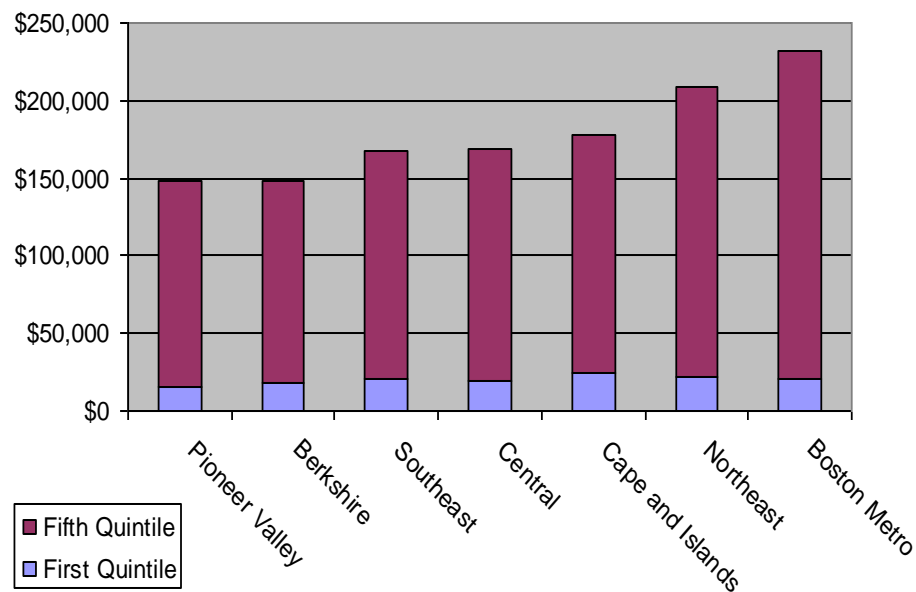


Growing Inequality: income gaps have grown among households within regions as well as across regions.

Median of First and Fifth Quintiles of Family Income Across Benchmark Regions, 1979



Median of First and Fifth Quintiles of Family Income Across Benchmark Regions, 2006

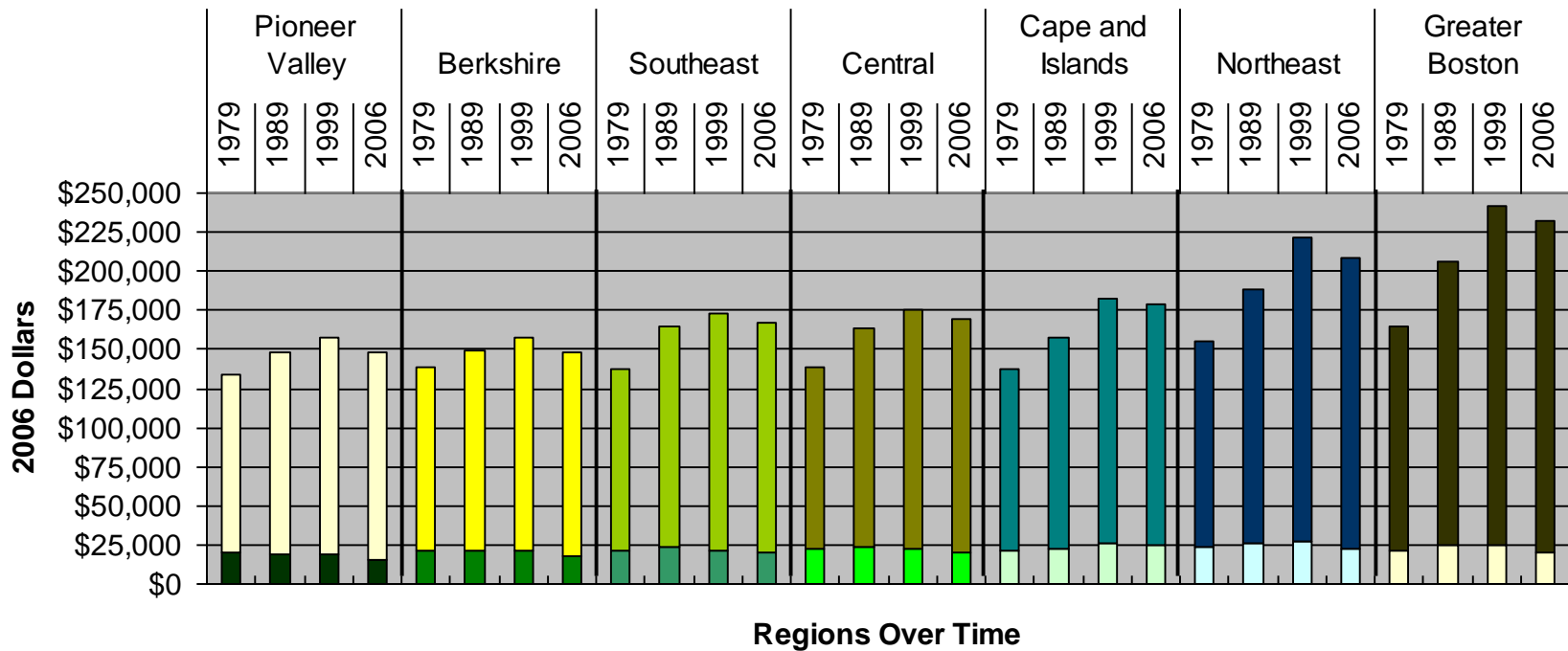


Sources: U.S. Decennial Censuses in 1980, 1990, and 2000, and American Community Surveys in 2005 and 2006. Figures are in 2006 Dollars.



Regional Inequality: as traditional industries have declined and the knowledge economy in eastern Massachusetts has expanded.

Median of First and Fifth Quintiles of Family Income Across Benchmark Regions

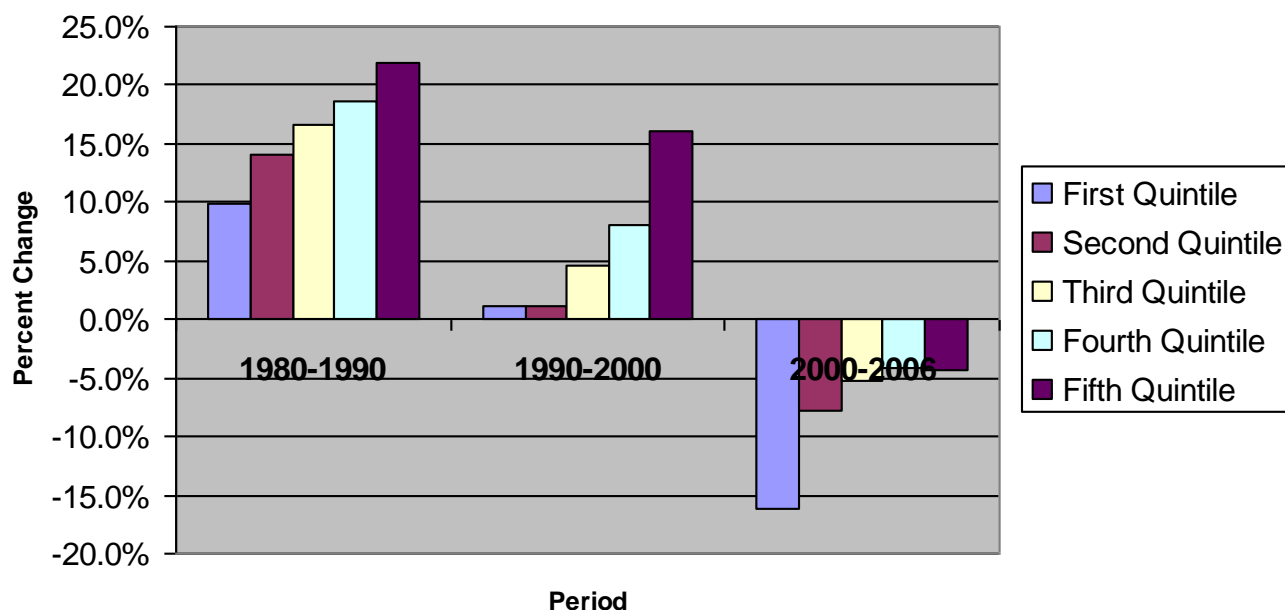


Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.



Income Inequality, has been a growing problem for nearly twenty years and an crisis for the past eight years – nationally as well as in the state.

Percent Change Massachusetts Family Median Income 1980-1990, 1990-2000, 2000-2006



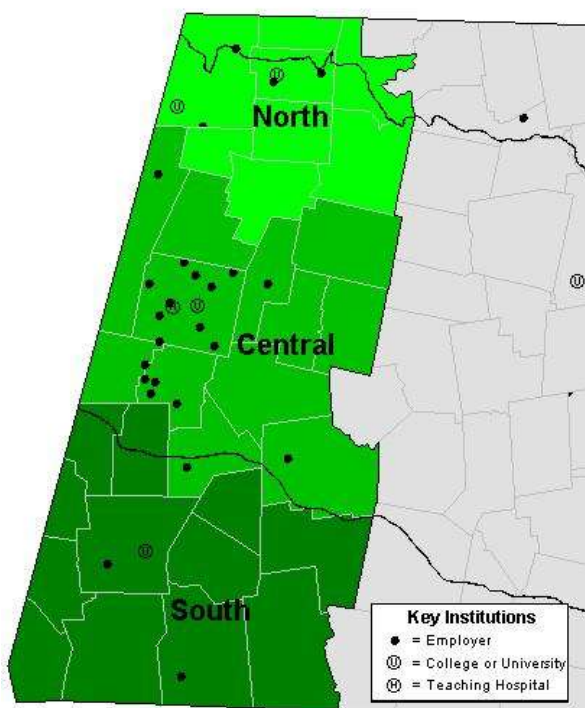
Analysis - Declining incomes are a national problem that is also affecting people in Massachusetts. The state has undergone a transformation from healthy and equitable income growth across quintiles in the 1980s to starkly inequitable and declining income since 1999. In this decade, households across all quintiles have declined, as measured before the recent economic downturn.

Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.



Regional Profile Berkshire Region

**MassBenchmarks Berkshire Region
and Subregions with Key Institutions**



Sources: MassGIS, UMass Donahue Institute,
Employer Data: Labor and Workforce Development Office http://wln.bz.doh.state.ma.gov/mass_benchmark_employer_index.asp,
College or University Data: NCES Integrated Postsecondary Education Data System <http://nces.ed.gov/ipeds/>,
Teaching Hospital Data: http://www.healthgrades.com/teaching_hospitals_in_massachusetts.htm

REGIONAL MUNICIPALITIES BY RPA

Berkshire Regional Planning Commission: Adams, Alford, Becket, Cheshire, Clarksburg, Dalton, Egremont, Florida, Great Barrington, Hancock, Hinsdale, Lanesborough, Lee, Lenox, Monterey, Mount Washington, New Ashford, New Marlborough, North Adams, Otis, Peru, Pittsfield, Richmond, Sandisfield, Savoy, Sheffield, Stockbridge, Tyringham, Washington, West Stockbridge, Williamstown, Windsor

Representative Key Institutions and Employers

Berkshire Community College
Massachusetts College of Liberal Arts
Simons Rock College of Bard
Williams College
B. Mango & Bird
Berkshire Health Systems
Crane & Co. Inc.
General Dynamics Defense Sys.



Regional Snapshot for Berkshire

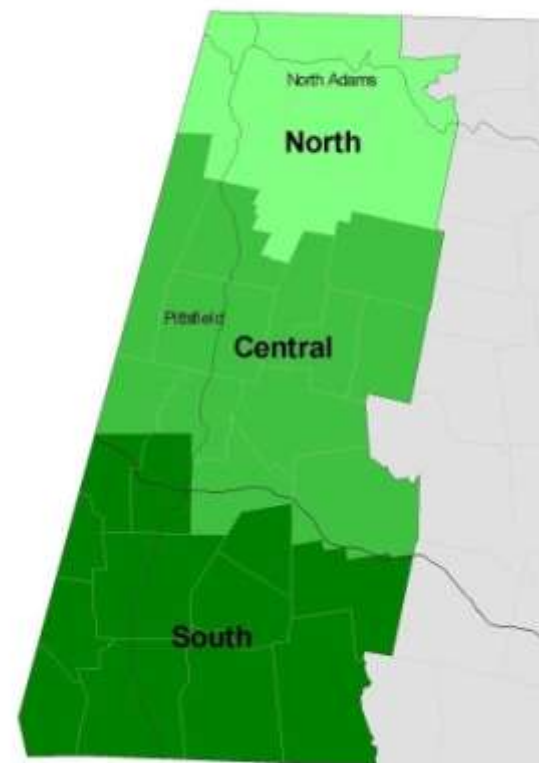
ANALYSIS, Regional Economy

The regional economy is largely composed of locally-serving industries, including the Healthcare sector and industries supporting residential construction. The region has a rich and storied community of cultural institutions that support a strong tourism and second-home market. Despite this, households - including family households - have declined and there is significant population loss in the region, most acutely among young people. Educational services have also declined. The growth in residentially-serving industries is primarily related to second homeowners who vacation in the region, this sector is very likely to be negatively affected by the economic downturn.

While there are no significant research institutions in the region, there appears to be significant potential for growth in Creative Economy ventures. The absence of widespread broadband connectivity is a major barrier to the development of this sector. Leisure & Hospitality has experienced strong growth in some sub-sectors. One obstacle to the growth of the Creative Economy is the paucity of venture capital funding in the region. Less than a quarter of a percent of all such funding statewide went to firms in the region in 2006.

Manufacturing - historically, a regional job producer - has suffered serious job loss and continues to decline in all sub-sectors, including plastics.

Berkshire Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Implications for Berkshire

Cross-Cutting Issues

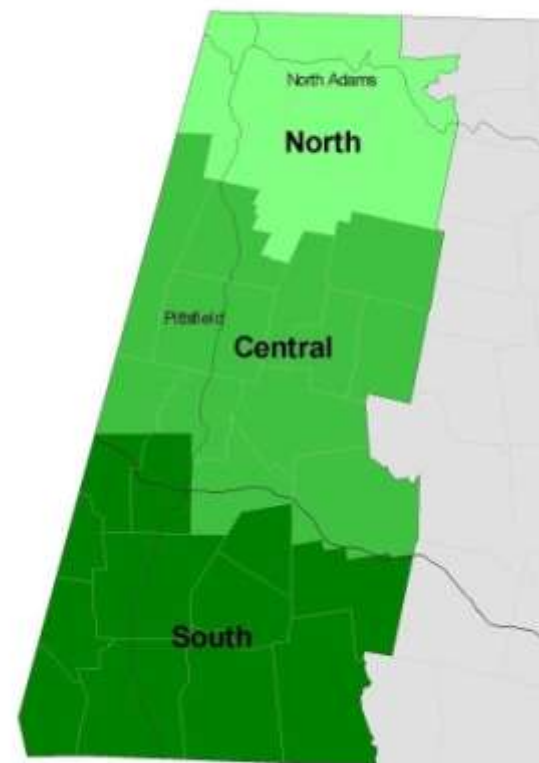
Broadband Access - A centerpiece of regional economic development efforts is the courting of small businesses and consultancies that are not location dependant but are drawn to the Berkshires by the regional brand and high quality of life.

Scale of State Programs – Regional actors expressed concern that state programs are geared to the Boston metropolitan region. Regionally significant developments are sometimes too small to get serious attention, or even meet minimum threshold requirements, from agencies such as DHCD. Our regional informants seemed much more satisfied with state agencies that maintain a regional presence like MOBD and Mass Highway.

Rural and Agricultural Policy – There is interest interested in utilizing timber resources, perhaps in conjunction with state efforts to encourage the use of bio-fuels in power generation projects.

Workforce Development – Regional experts expressed the concern that the Commonwealth is overly centralized and sometimes slow to react when regional employers require workforce assistance.

Berkshire Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Implications for Berkshire

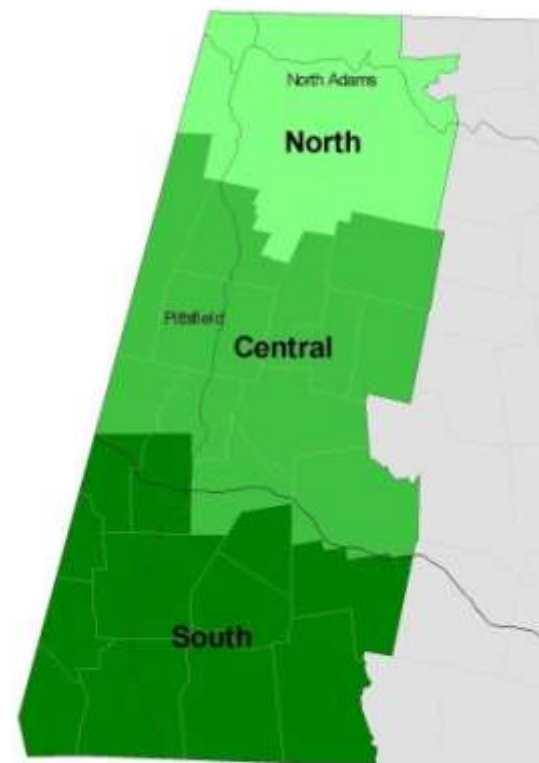
Cross-Cutting Issues

Educational Attainment – Local leaders are very concerned about the region’s level of educational attainment. One report notes that, “up to 35 percent of our labor force may lack even the most basic literacy skills necessary for the 21st Century workplace.” While the region made significant progress in reducing the percentage of its population without a high school diploma from 1990-2006, the region fell further behind the Commonwealth wide percentages of college graduates and those with graduate degrees.

Energy Prices – This is a big regional concern in the Berkshires. As recently as spring 2008, regional actors were working to keep a local company from relocating to the Midwest for far lower energy costs. Regional experts are deeply concerned that unless state and regional leaders are able to create stable and predictable energy pricing they will be a non-competitive location for businesses, particularly in manufacturing.

Youth Retention – Regional actors are very concerned about the loss of young people, particularly college educated youth, from the region. Programs, such as DHCD’s employer-assisted housing program, may be useful models to provide incentives to young adults to purchase homes in the region.

Berkshire Region and Subregions



Source: MassGIS, UMass Donahue Institute



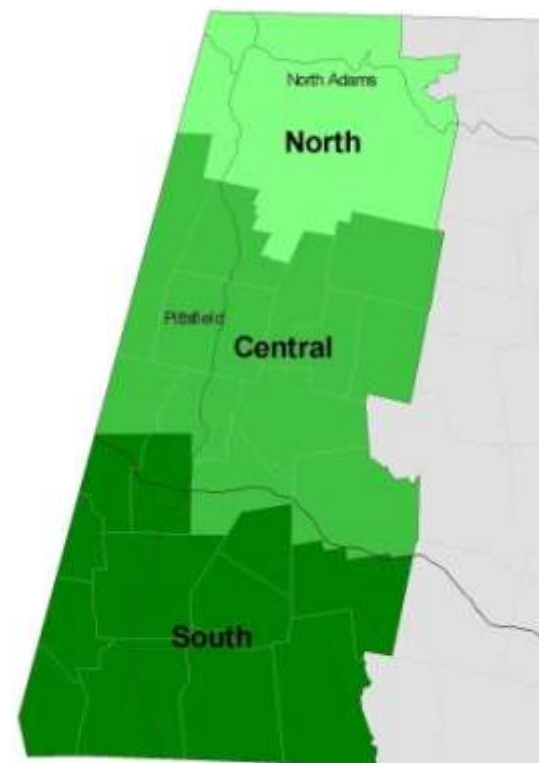
Key Implications for Berkshire

Region-specific Issues

Lack of Institutional Capacity – Outside of the Leisure & Hospitality sector, the Berkshires lack large regional actors to spur growth and economic diversification. The region suffers from the absence of a substantial research institution, on the scale of the University of Massachusetts or MIT.

Need for Regionalization and Efficiencies – Regional experts noted the need to reduce fiscal pressures on municipalities through cost-sharing and the development of joint-infrastructure and facilities by adjacent municipalities. At present, there are conflicting incentives for communities to operate regionally in some cases and, frankly, to compete with adjacent communities in other instances. The state should incent and enhance local efforts at necessary efficiencies and reforms.

Berkshire Region and Subregions



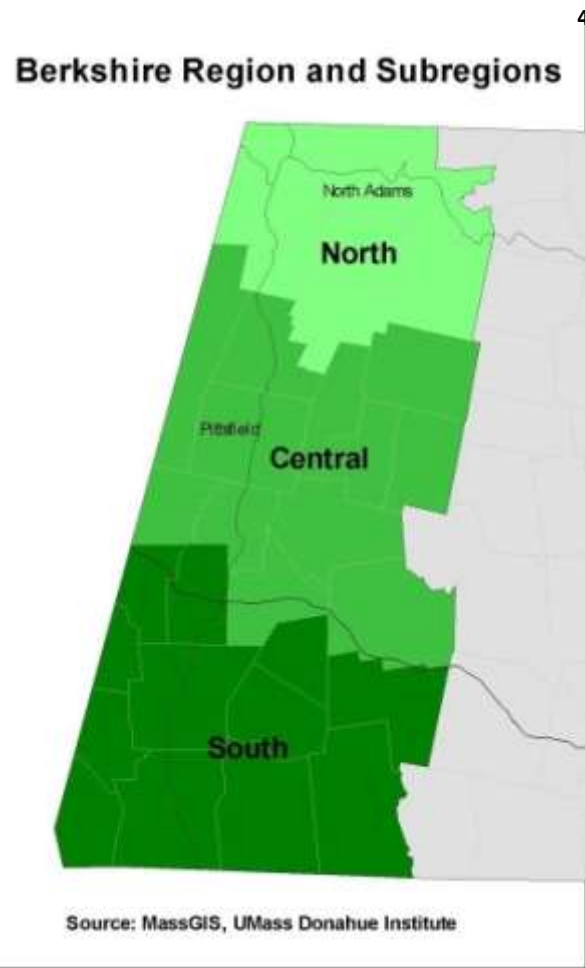
Source: MassGIS, UMass Donahue Institute



Key Actions for Berkshire

Priority Projects of Regional Significance

- Implementation of the Broadband Initiative
- Development of the Pittsfield Growth District
- Berkshire Airport runway expansion
- Strengthening economic development connections with Albany and upstate New York.



Regional Snapshot for Berkshire

LEADING INDUSTRIES, 2007

Healthcare, representing 15.0% of regional employment (in 2006)*

Leisure & Hospitality, representing 14.3% of regional employment

Retail, representing 14.2% of regional employment

EMPLOYMENT TRENDS, 2001-2007

Trends in Export-oriented Industries:

- Manufacturing declining in all sectors, including plastics
- Leisure & Hospitality growth has been strong in some industries, but declining in Amusements

Trends in Locally-serving Industries:

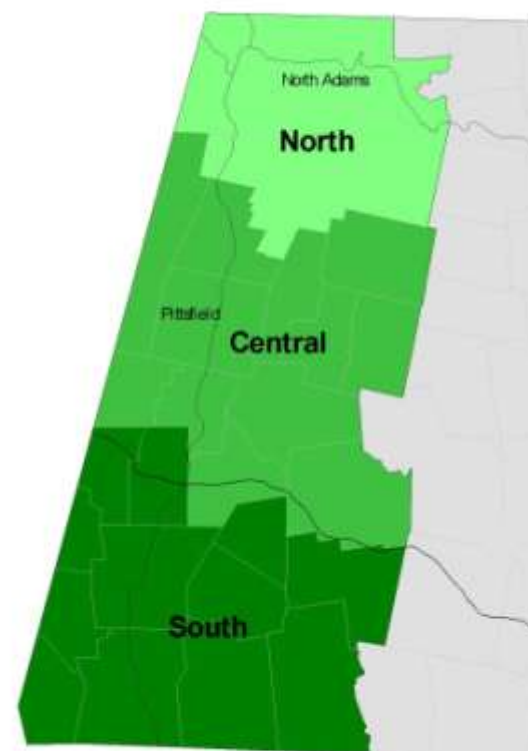
- Education employment has declined
- Healthcare and Financial Services growth are strong

HOUSING TRENDS, 2000-2006

- The region had 2.3% of all households in 2006, a decline of 1.6% since 2000.
- There was a 2.1% increase in homeownership and a 7.3% decline in renters.
- There was a 1.6% decline in family households.

*Employment data for the Hospital sub-sector was suppressed in 2007.

Berkshire Region and Subregions



Source: MassGIS, UMass Donahue Institute



Innovative Capacity for Berkshire

NIH AWARDS, 2006

- 3 Awards to totaling \$393,387
- 1 institution received NIH funding
- Williams College was the only recipient with \$393,387

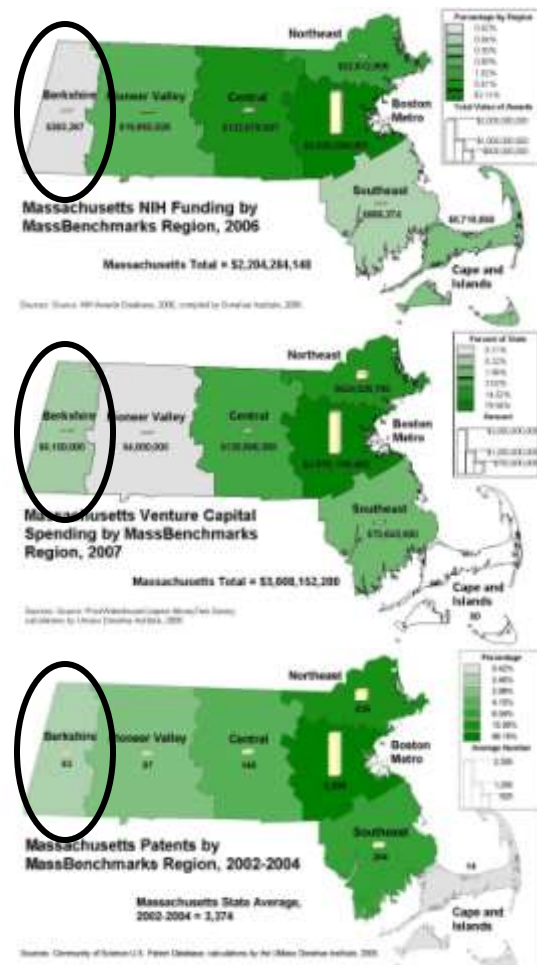
VENTURE CAPITAL FUNDING, 2006

- \$8,100,000 or 0.22% of all VC funding in Massachusetts went to firms in this region.
- Software was the only industry receiving VC funding.

PATENTS, 1973-2004

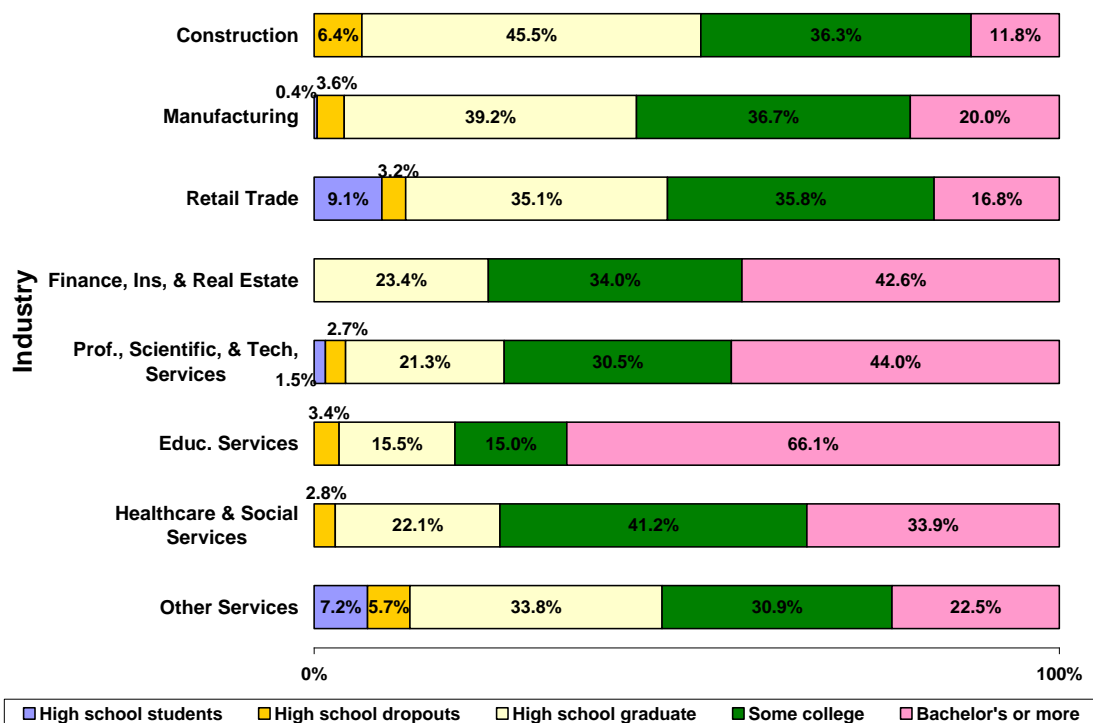
	1971-1973	2002-2004
State Total	1,130	3,374
Berkshire	34	83

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Educational Attainment for Berkshire WIB

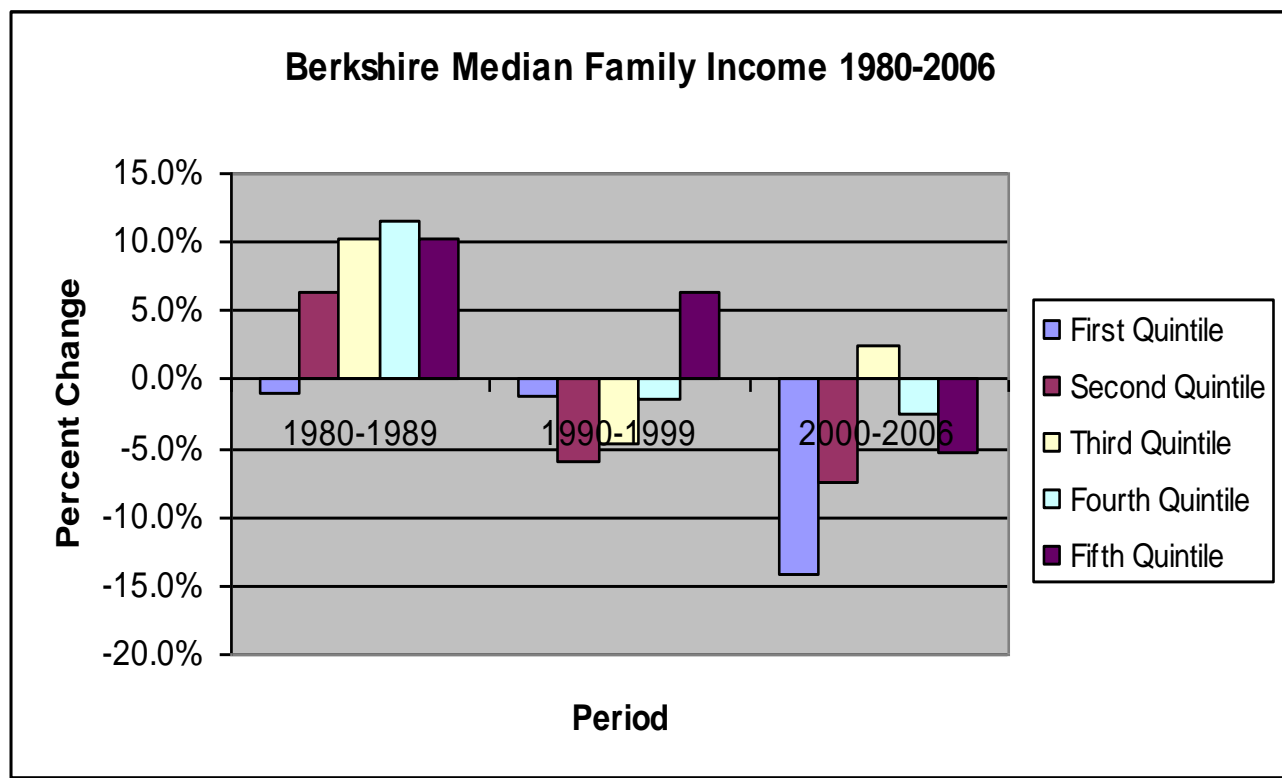
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Growing Inequality in the Berkshire Region, 1979-2006

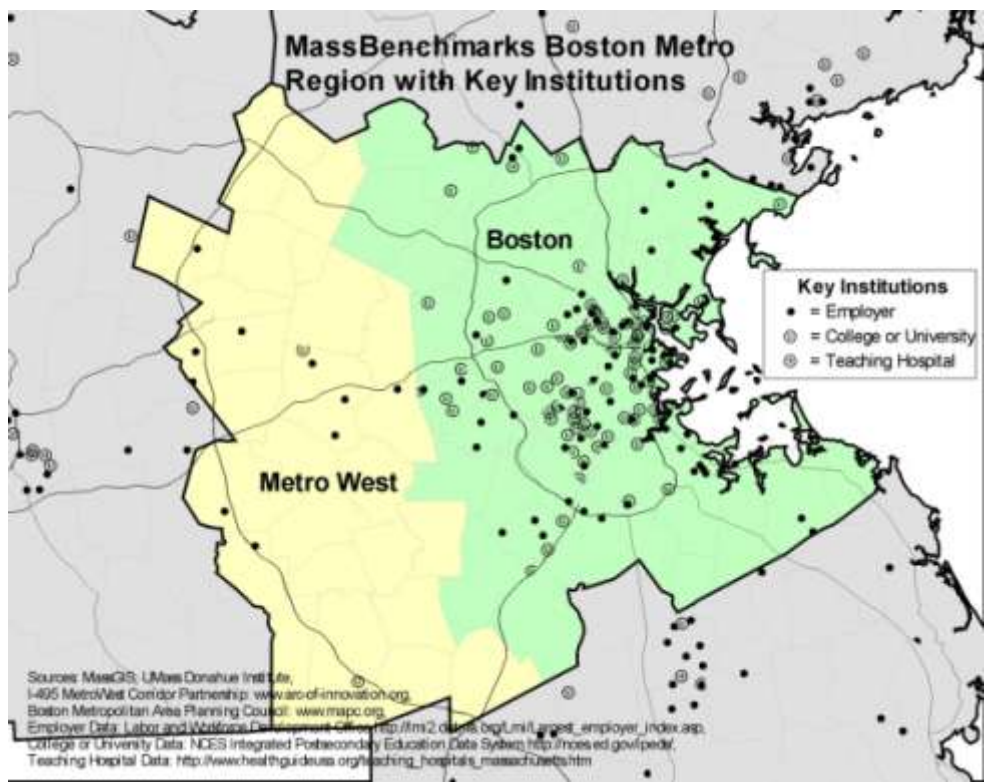


Analysis - While the region experienced healthy income growth in the 1980s, this trend completely reversed itself since 1989. In the 1990s, only the top quintile showed any growth. Only the middle quintile showed any growth in the 2000s, but the lowest quintile experienced significant loss.

Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.



Regional Profile Boston Metro Region



REGIONAL MUNICIPALITIES BY RPA

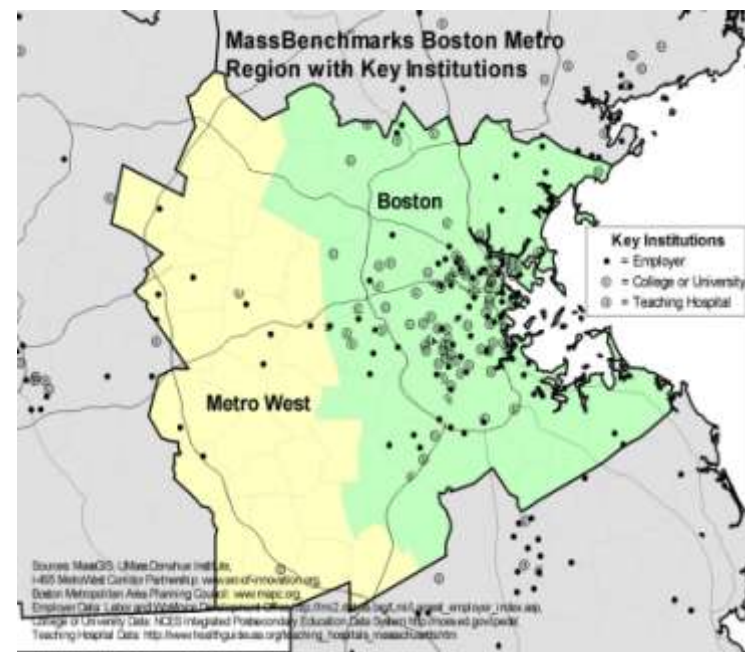
Metropolitan Area Planning Council: Acton, Arlington, Ashland, Bedford, Bellingham, Belmont, Bolton, Boston, Boxborough, Braintree, Brookline, Burlington, Cambridge, Canton, Carlisle, Chelsea, Cohasset, Concord, Dedham, Dover, Everett, Foxborough, Framingham, Franklin, Hingham, Holbrook, Holliston, Hopkinton, Hudson, Hull, Lexington, Lincoln, Littleton, Lynn, Malden, Marlborough, Maynard, Medfield, Medford, Medway, Melrose, Milford, Millis, Milton, Nahant, Natick, Needham, Newton, Norfolk, Norwood, Quincy, Randolph, Revere, Saugus, Sharon, Sherborn, Somerville, Southborough, Stoneham, Stow, Sudbury, Swampscott, Wakefield, Walpole, Waltham, Watertown, Wayland, Wellesley, Weston, Westwood, Weymouth, Winchester, Winthrop, Woburn, Wrentham



Key Institutions in Boston Metro

Representative Key Institutions and Employers
Bank Of New York Mellon Corp
Bentley College
Beth Israel Deaconess Medical
Bose Corp
Boston College
Boston Housing Authority
Boston Medical Center
Boston Red Sox
Boston Scientific Corp
Boston University
Brigham & Women's Hospital
Brown Brothers Harriman & Co
Cambridge Hospital
Caritas Norwood Hospital
Carney Hospital
Children's Hospital Boston
Christian Science Monitor
Dana Farber Cancer Institute

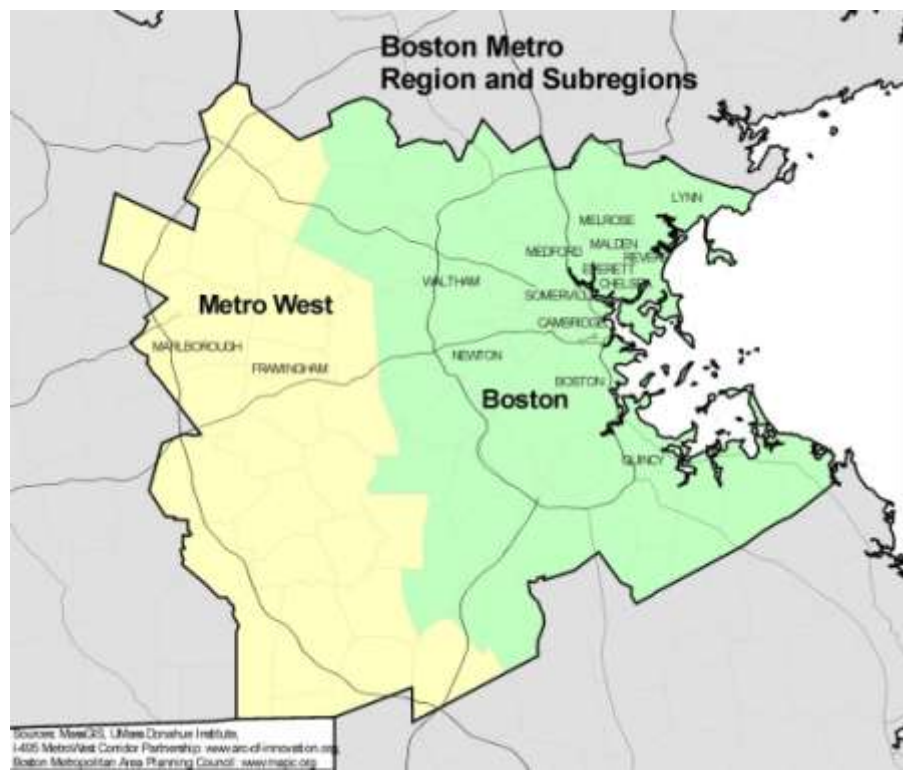
Representative Key Institutions and Employers
Draper Laboratory
EMC Corp
Fidelity Investments Life Ins
GE Aircraft Engines
General Dynamics
Genzyme Corp
Harvard University
Harvard Pilgrim Health Care
Hewlett-Packard
John Hancock Life Ins Co
Laboratory For Nuclear Science
Massachusetts General Hospital
Massachusetts Institute of Technology
MIT-Research Lab-Electronics
Northeastern University
Tufts New England Medical Center
University of Massachusetts-Boston



Regional Snapshot for Boston Metro

ANALYSIS, Regional Economy

Boston Metro has a strong and diverse economy, which – along with the Northeast – drives the Massachusetts economy. Compared to other regions of the state, Manufacturing is not a large sector of the economy. Construction employment declined between 2001 and 2007, largely due to the end of the Big Dig. Additional construction job losses since 2007 are attributable to the housing market slump. Information Technology suffered job loss between 2001 and 2004, but has since rebounded. Professional and Technical Services, Healthcare and Education, the bedrock sectors of the knowledge economy, have also grown in this region since 2004.



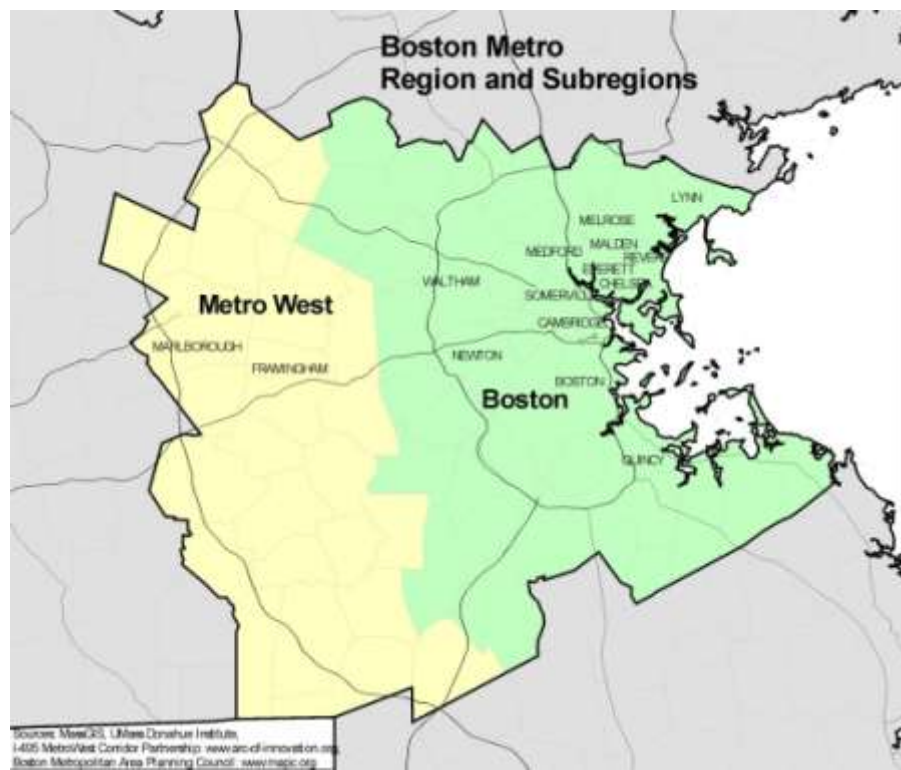
Key Implications for Boston Metro

Cross-Cutting Issues

Scale of Programs – There is evidence that smaller communities support smart-growth, but do not know how to actually implement it. There is a need for more planning capacity to use local-option tools.

State Vision – There has been a general call for greater coordination of policies and clear direction from the state regarding economic development priorities.

Workforce development/Educational Attainment – Educational attainment and training in Boston Metro is highly uneven. Boston Metro includes many of the most highly-educated communities in the United States and the workforce is a profound strength for the Commonwealth. Despite that renowned competitive strength, there are neighborhoods and communities in the region that have very low educational attainments, and industries that have job vacancy mismatches with the available labor force.



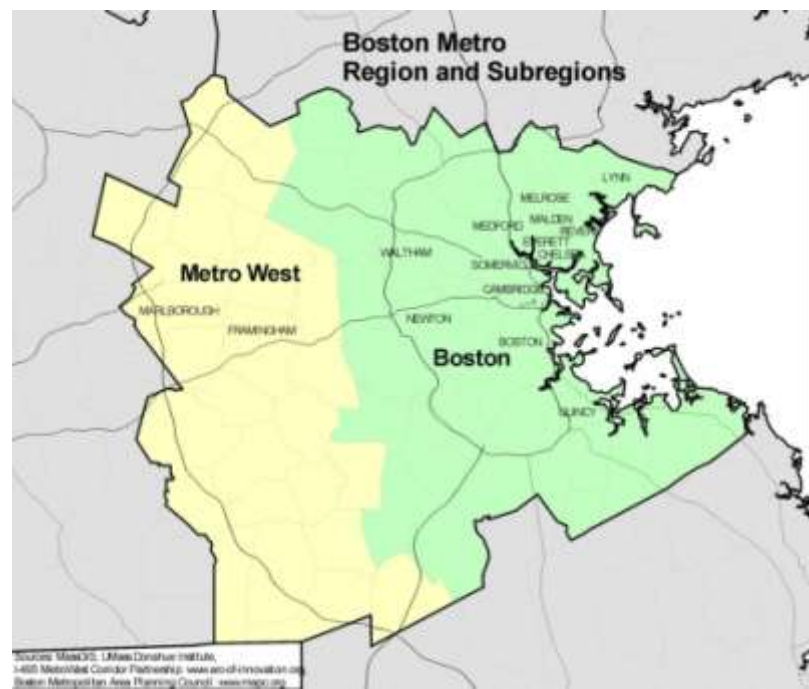
Key Implications for Boston Metro

Region-specific Issues

Retaining mature industry – It has been difficult to harness innovative capacity of leading industries to spur widespread economic development benefits: While R&D is taking place in the region, Boston is increasingly unable to capture the jobs that are further down the product chain, such as manufacturing.

Workforce – The region consists of two workforces. In the aggregate, the region has a very well educated workforce, but a slow growing population and the out-migration of locally-educated younger workers present workforce challenges. The Commonwealth is highly dependent on international immigration for population growth, however much of the immigrant population is under-skilled, creating a mismatch with job opportunities in a knowledge economy (vibrant R&D has not produced local production opportunities). MAPC's *MetroFuture* project highlights education and the need to deal with workforce barriers – CORI system, linguistic, childcare. The Commonwealth confronts clear challenges to improve the skills and educational attainments of many of its residents while retaining more of those students who are educated in the region's colleges and universities.

Water – This is a major issue in the Metro West region. Water conservation and wastewater treatment are both significant issues for a rapidly growing region. This is fundamentally a challenge that is related to both land use, conservation and efficient-design, and the need for regional planning and financing of expanded water-related infrastructure.



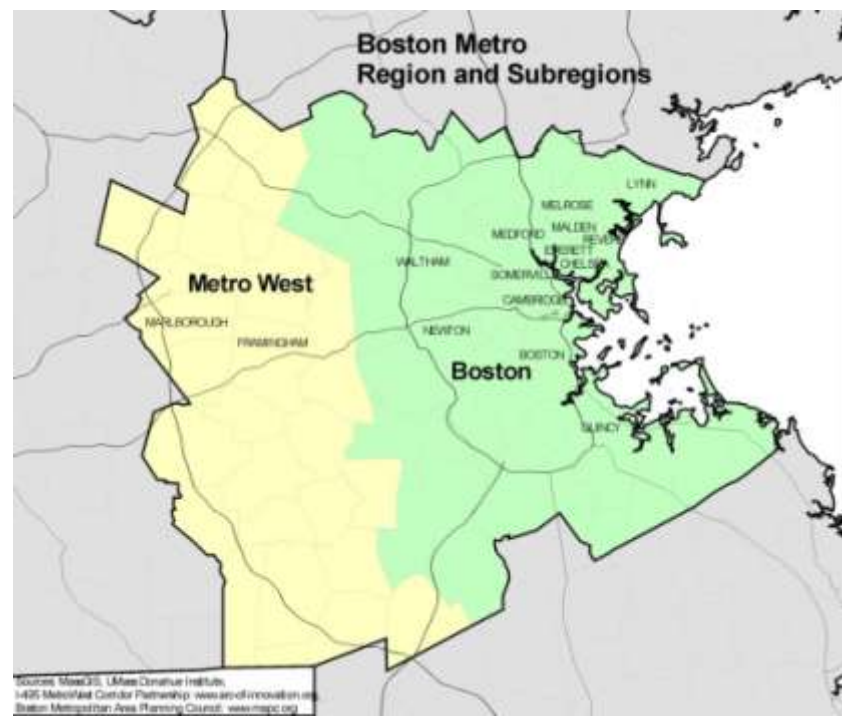
Key Implications for Boston Metro

Region-specific Issues

Transportation – The following needs exist: stronger links between land-use and transit decisions; more planning capacity; prioritizing state funds for regional projects; improving efficiency in delivery; better asset-management; making more revenue tools available for systems; improvements to transit operations (return trips), and expansion of multi-modal options.

Pockets of Distress/Redevelopment – Despite half of the state's economic activity taking place within the Boston Metro region, inner core cities like Chelsea, Everett, Quincy, Lynn, Revere, and the neighborhoods of Dorchester and Roxbury are not benefiting from it. Boston Metro has strong local governments and a tradition of local leadership; but the state can play a convening role in building creative partnerships to link long distressed communities to the growth areas within the region.

Equitable Economic Impact – While in aggregate, the region has a diverse and strong economy, there is great geographic variation, with much of the benefit concentrated with educated workers living in the suburbs, particularly MetroWest, where the average wage is higher than the state and demographically is better educated. The inner urban core has not fared nearly as well, with median household incomes in those cities much lower than the regional median.



Key Implications for Boston Metro

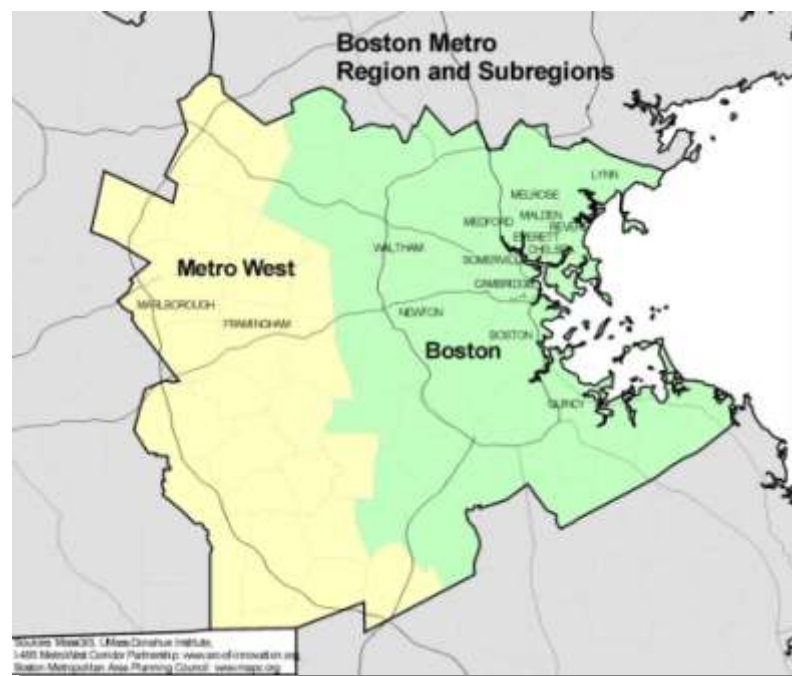
Region-specific Issues

Growth of the Edge City – The Boston suburbs of Metro West are net exporters of workers and have an unemployment rate lower than the state's. At present, the Boston Metro transportation system emphasizes commutes into Boston or along Route 128; however, the Interstate 495 arc of municipalities is a growing center for employment in the region. The spoke and hub transportation system that has developed does not appropriately connect the workforce to where their jobs actually are, nor does it address inter-municipal growth impacts along major routes.

Municipal capacity – There is a need for stabilizing municipal finance (which is seen as the criteria for most land-use decisions in the region) through additional state funding, local policy tools, and enforcing existing revenue streams. Regional experts call for the continued streamlining of commercial development permitting process and the implementation of programs to enhance commercially-taxable development capacity.

Inter-municipal capacity – MAPC advises statutory changes in how municipalities do procurement, acquire health insurance, and the inter-municipal services agreement statute (currently requires local legislative approval for an agreement). Outside the metro core, there is much room for inter-municipal collaboration on water and waste-water, something that will be necessary for future economic growth.

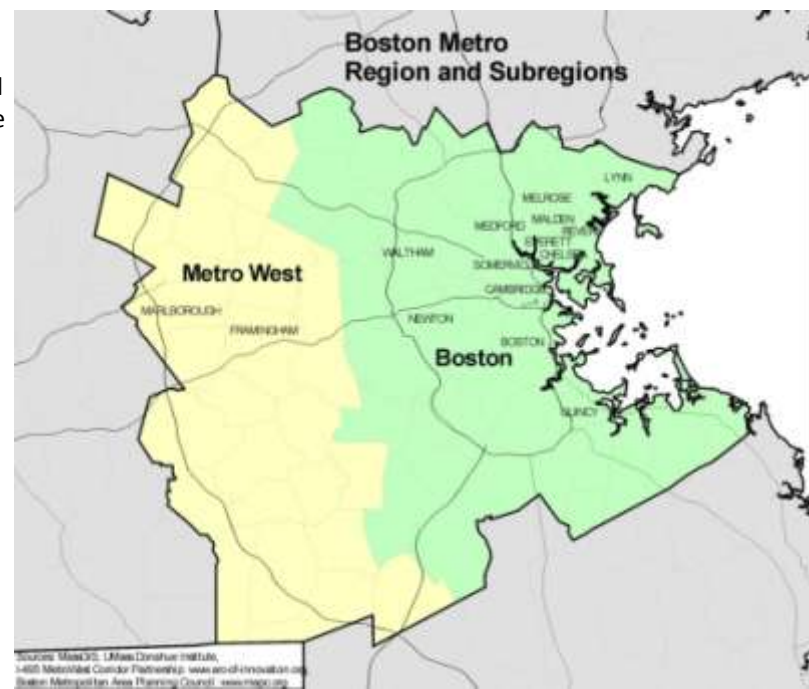
Planning capacity – Regional experts see a need for more resources for general community planning as well as technical assistance on implementing specific policy tools for municipalities. New local tools are also desired, such as zoning reform and Prop 2 ½ new growth exemption limited to planned areas, and better coordinating of state policies to prevent contradictory directives and unnecessary obstacles.



Key Actions for Boston Metro

Priority Projects of Regional Significance

- Water Issues: 1) review state regulations on reuse of wastewater, 2) encourage reuse through MEPA, School Building Authority, SRF, DCAM, etc. 3) State TA to communities on water conservation issues, 4) incent local water policies through the Commonwealth Capital Program and other discretionary programs, 5) review regulations to encourage small private wastewater systems to mitigate new demand on existing systems
- Boston Environmental Science Technology Park: Venture Development Center at UMass Boston
- Downtown Malden Redevelopment
- Libbey Park Sewerage Pumping Station, Weymouth
- General Electric Revitalization Project, Lynn
- Lynn Waterfront Redevelopment
- Assembly Square Access Roadways, Somerville
- Green Line extension to Somerville, including Union Square redevelopment
- South Weymouth Naval Air Station Project
- Triangle Business Park, Framingham
- Jackson Square Redevelopment Initiative, Boston
- Chinatown Gateway / South Bay Redevelopment, Boston
- Melnea Cass Blvd Redevelopment, Boston
- Charlestown Navy Yard Pier 4 Dredging and Restoration, Boston
- Rte. 495 Corridor Study



Regional Snapshot for Boston Metro

LEADING INDUSTRIES, 2007

- Healthcare, representing 15.0% of regional employment
- Professional & Technical Services, representing 14.4% of regional employment
- Education, representing 9.7% of regional employment

EMPLOYMENT TRENDS, 2001-2007

Trends in Export-oriented Industries:

- Healthcare shows the strongest growth at 14.7%.
- Manufacturing declined 26.8%
- IT declined almost as strongly as Manufacturing through 2006, at which time the decline slowed

Trends in Locally-serving Industries:

- Construction showed strong decline (over 12%), lead by the end of the Big Dig and the loss of thousands of jobs in the Heavy Construction industry.
- Most sectors saw decline between 2001 and 2004 but began recovering between 2004 and 2006.

HOUSING TRENDS, 2000-2006

- The region had 41.1% of all households in 2006, a decline of 1.0% since 2000.
- There was a 4.9% increase in homeownership and a 8.2% decline in renters.
- There was a 1.0% decline in family households.



Innovative Capacity for Boston Metro

NIH AWARDS, 2006

- 4,715 Awards to totaling \$2,030,334,063
- 149 institutions received NIH funding
- Massachusetts General Hospital was the largest recipient with \$293,259,960

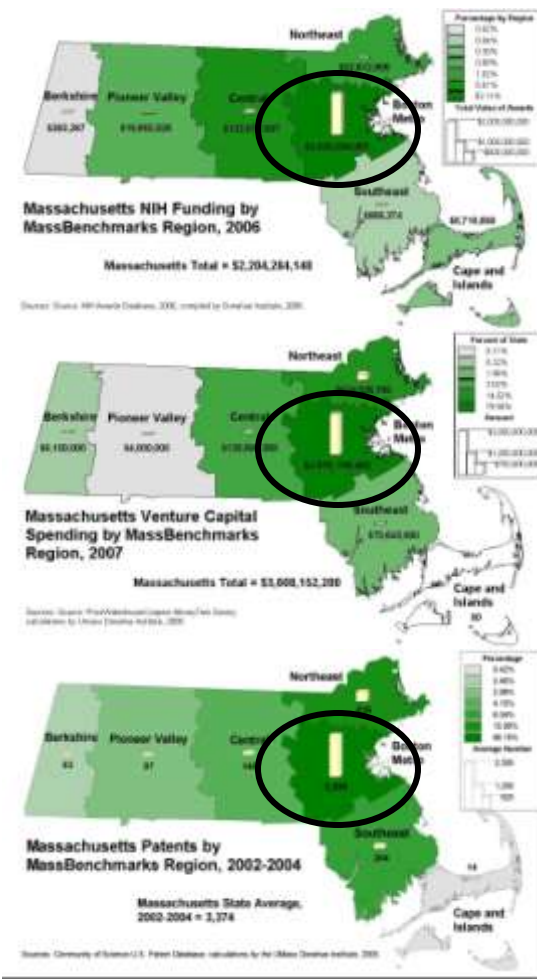
VENTURE CAPITAL FUNDING, 2006

- \$2,870,786,400 or 79.56% of all VC funding in Massachusetts went to firms in this region.
- The largest industries receiving VC funding were
 - Biotech, with 31.1%
 - Software, with 23.0%

PATENTS, 1973-2004

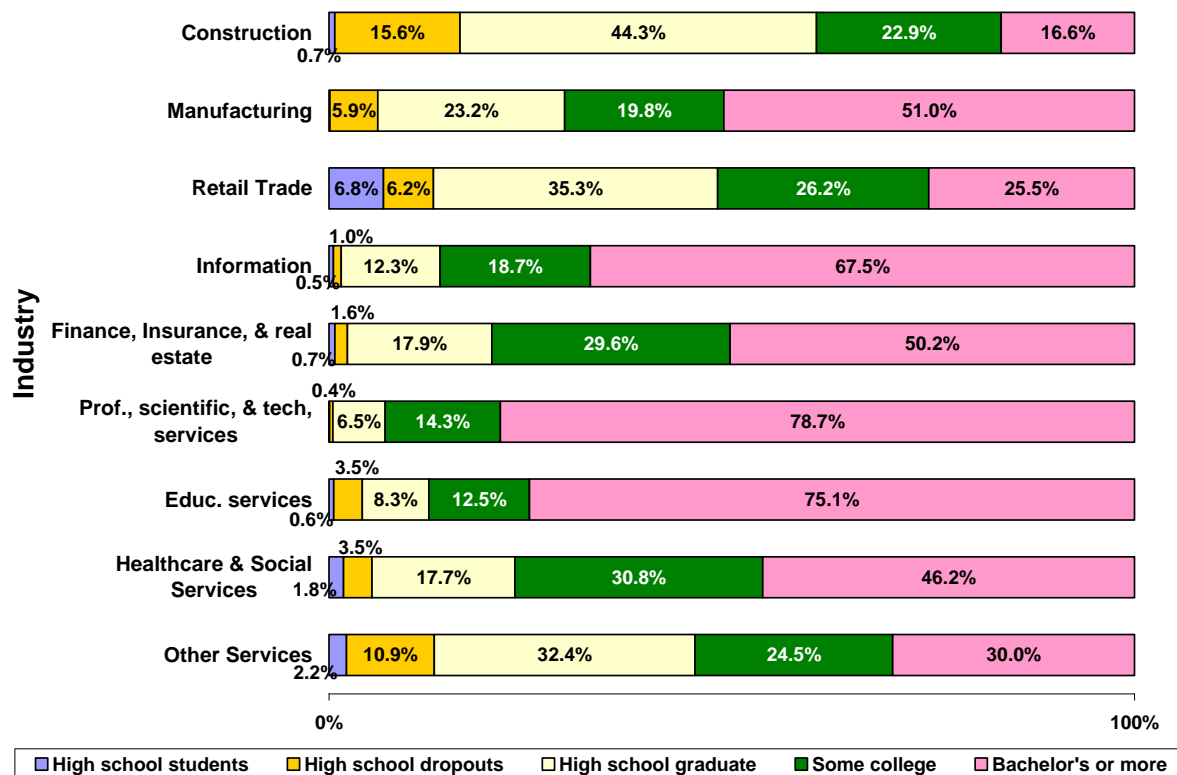
	1971-1973	2002-2004
State Total	1,130	3,374
Boston Metro	801	2,298

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Educational Attainment for Metro North WIB

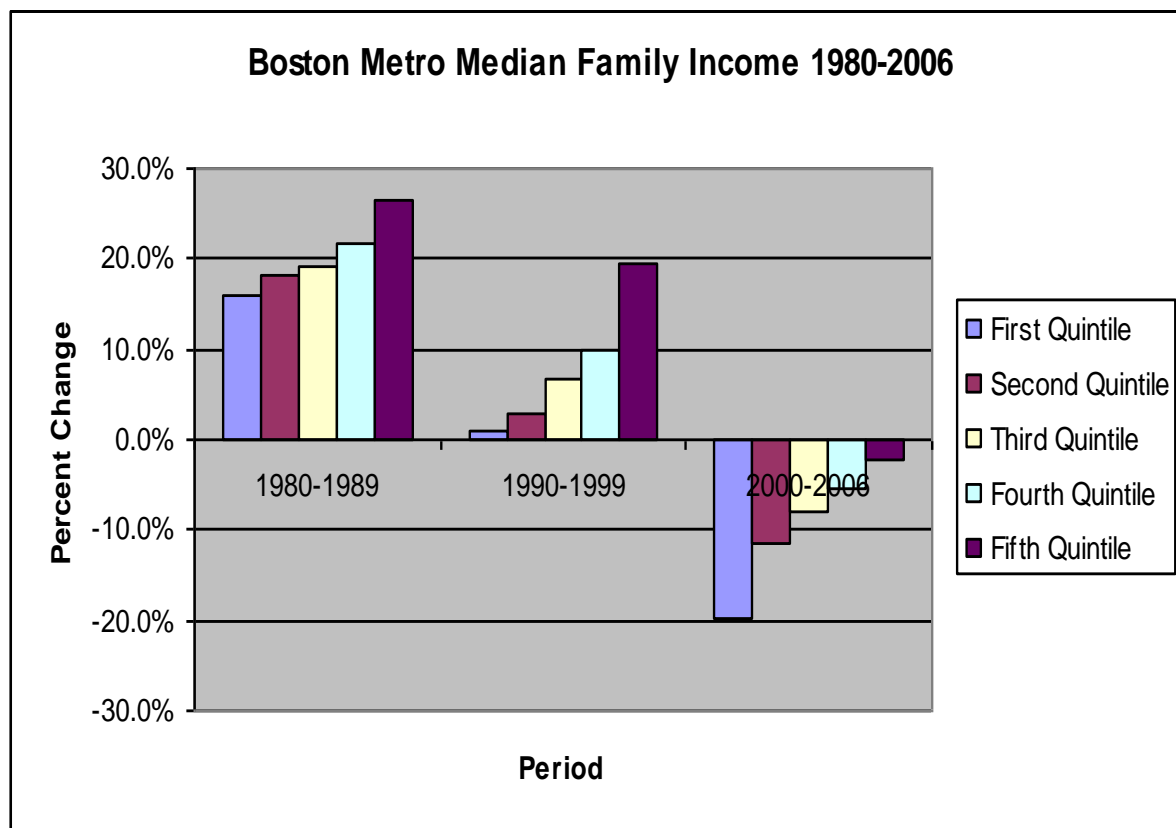
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Growing Inequality in the Boston Metro Region, 1979-2006



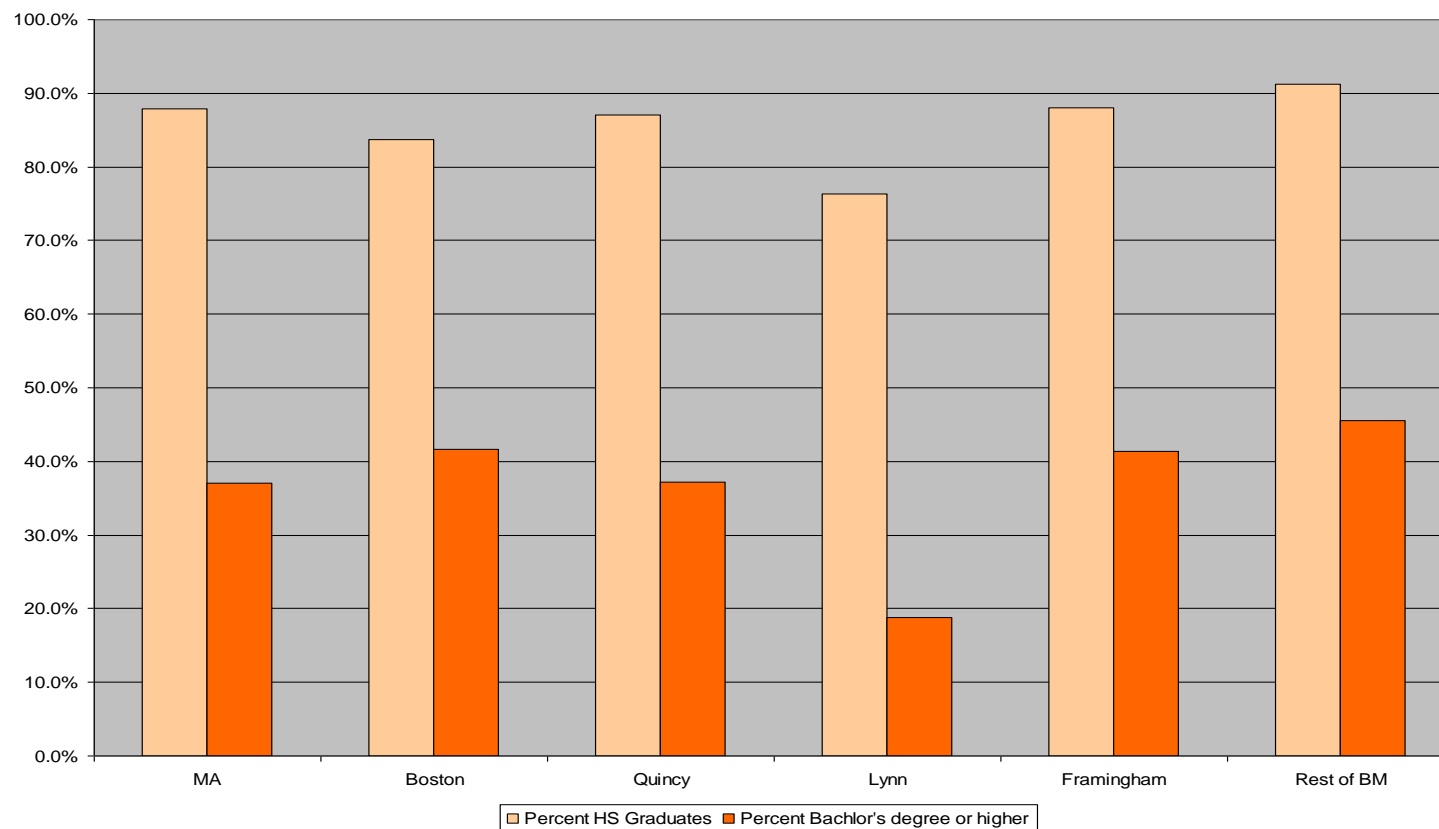
Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.

Analysis - Boston Metro's income growth picture is nearly identical to that of the state. The region has concurrently with the state undergone a radical transformation from healthy and equitable income growth across quintiles in the 1980s to starkly inequitable and declining income since 1999. Although the top quintile has grown significantly since 1989, it has actually declined – along with all other quintiles – since 1999.



Educational Attainment in Boston Metro

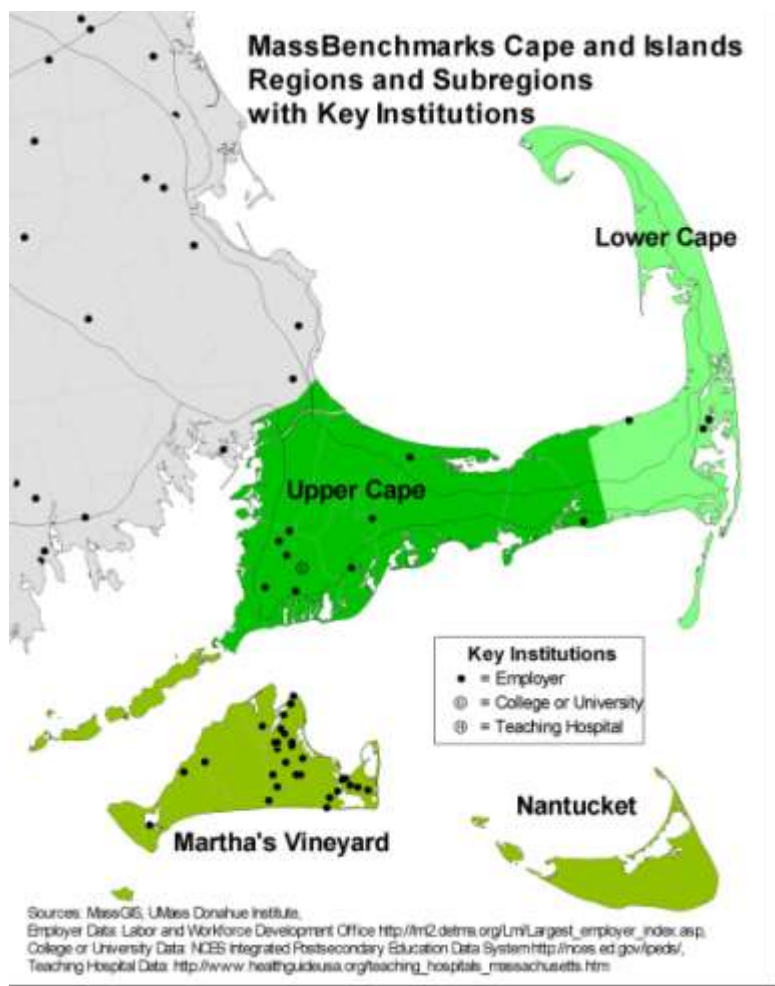
EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006



Source: U.S. Bureau of the Census 2006 ACS.



Regional Profile Cape & Islands



REGIONAL MUNICIPALITIES BY RPA

Cape Cod Commission: Barnstable, Bourne, Brewster, Chatham, Dennis, Eastham, Falmouth, Harwich, Mashpee, Orleans, Provincetown, Sandwich, Truro, Wellfleet, Yarmouth

Martha's Vineyard Commission: Aquinnah, Chilmark, Edgartown, Gosnold, Oak Bluffs, Tisbury, West Tisbury

Nantucket Planning and Economic Development Commission: Nantucket

Representative Key Institutions and Employers

Cape Cod Community College
Massachusetts Maritime Academy
National Graduate School of Quality Management
Air National Guard
Falmouth Hospital
Nantucket Airlines
Ocean Edge Resort & Golf Club
Orleans Inn & Restaurant
Steamship Authority
Woods Hole Oceanographic Institute



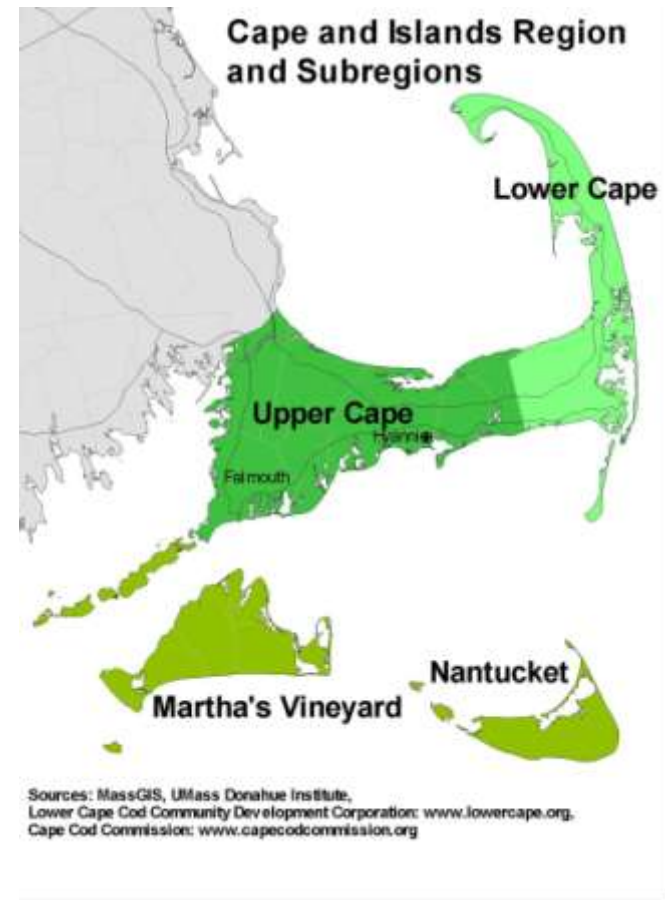
Regional Snapshot for Cape & Islands

ANALYSIS, Regional Economy

The Cape & Islands is a popular tourist and recreation destination, owing to its scenic and environmental assets. Consequently, Leisure & Hospitality is the largest sector of the regional economy. There was a lot of growth in residentially-serving sectors such as retail and construction. However, a closer look at the growth industries within these sectors suggests that the growth is serving second homes and remodeling or reconstruction of existing homes. There is evidence that the increasing number of retirees and the concurrent aging of the population are driving the growth in the Healthcare sector, especially since the employers in this sector are largely locally-serving businesses and institutions.

Construction experienced strong growth until 2006, when it began to decline. Financial Services, Professional & Technical Services and IT all showed modest decline. Although not a major sector on in the region, Manufacturing declined as elsewhere, losing more than a quarter of its workforce. Locally-serving industries have been growing in the region during this time period. Healthcare continues to enjoy strong growth. Other locally-serving sectors showed slow-to-modest growth. Leisure & Hospitality grew by less than four percent.

The region has little strength in export-oriented industries. No firms received any venture capital funding in 2006 and nearly all NIH funding was received by one institution in Woods Hole, the Marine Biological Laboratory. The Lower Cape sub-region constitutes an important sub-regional economy in which housing costs are compromising the ability of residents and workers to remain. The second house market is raising property values beyond the reach of even upper middle class residents.



Key Implications for Cape & Islands

Cross-Cutting Issues

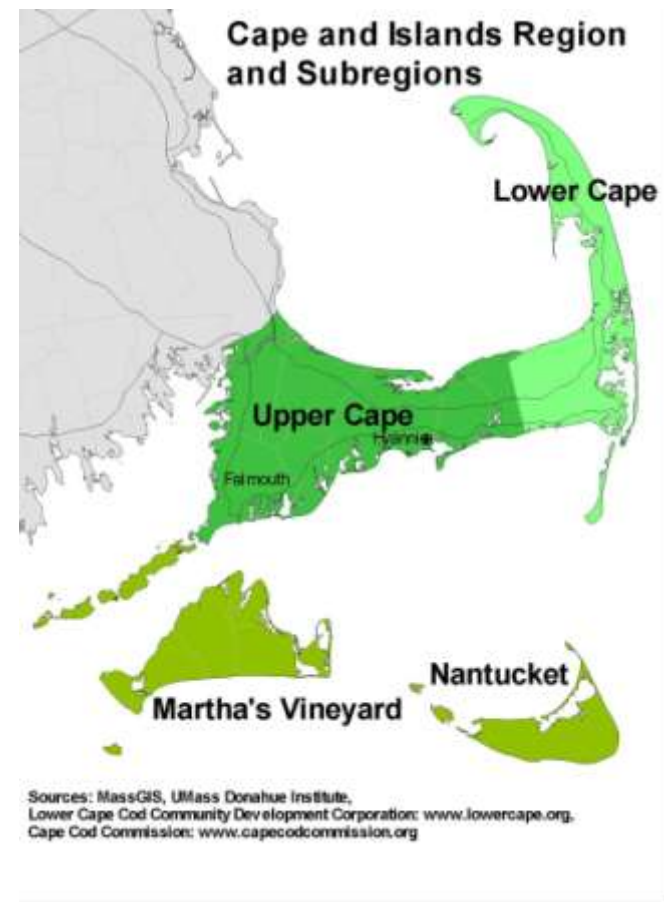
Scale of State Programs – The Cape and Islands is the second smallest region by population in the Commonwealth. The local perception is that state programs aren't designed to optimally serve this relatively small population's needs. Housing is the foremost example; the region urgently needs more affordable housing but can't support large projects.

Broadband Access – The lack of broadband access is particularly acute on the Lower Cape.

Educational Attainment – The region generally has a high level of educational attainment and good K-12 education systems. The statistics on educational attainment are skewed to some extent by the presence of large numbers of highly educated retirees but the issue is less of a concern than in some other regions of the Commonwealth.

Energy Prices – The region claims to suffer the highest energy prices in the 48 continental United States. High prices are a very big regional concern. Opposition to the Cape Wind project may be based upon aesthetic concerns but also on the perception that the project will do nothing to help lower regional energy prices.

Youth Retention – This is a big regional problem. On Martha's Vineyard the percentage of seniors is rising faster and the proportion of young people is dropping faster than anywhere else in the Commonwealth. Due, in part to a relatively good primary school system, many of the region's high school graduates leave the region for college. Many of them do not return. The high cost of housing and relative lack of large employers would seem to be a formidable barrier to attracting 19-44 year olds to move to the region.



Key Implications for Cape & Islands

Region-specific Issues

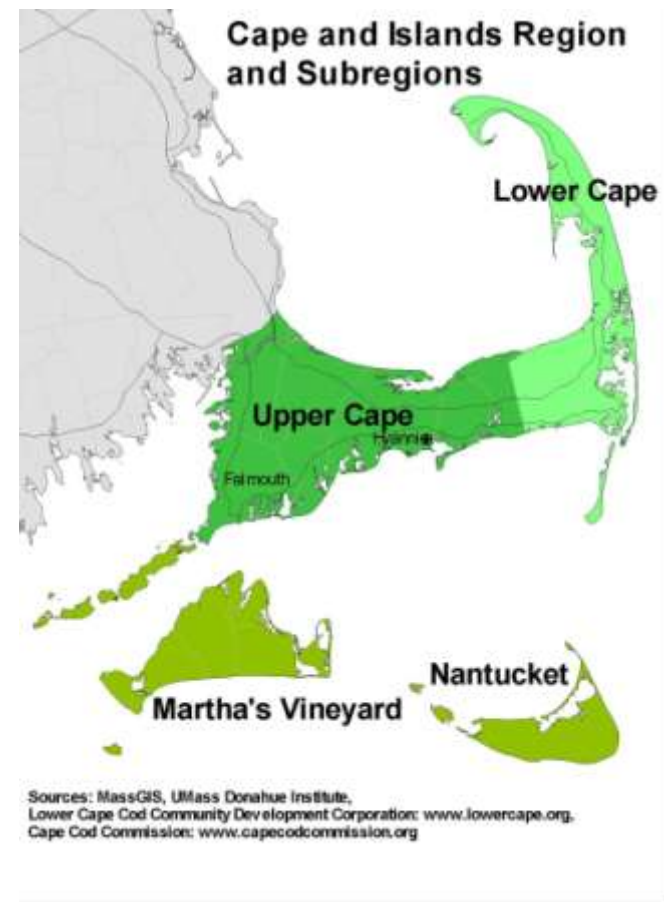
High Cost of Housing -- The region's housing costs are driven by the demand for retiree and vacation/seasonal housing. The price inflation caused by the influx of seasonal and retired homeowners has made it very difficult for the regional workforce to afford regional housing. The problem is particularly bad in the Lower Cape and on the Islands where long commute times make it impractical to draw workers in from more affordable housing markets.

Lack of Seasonal Workers -- On Cape Cod the lack of H2B visa workers is a problem without easy solutions. The Lower Cape, which is highly dependent on seasonal tourism, seems to be most seriously effected by the difficulty in attracting seasonal workers.

Aging Population -- The Cape and Islands has the highest percentage of population over the age of 55 of any region of the state. Barriers to in-migration seem to ensure that the region will face growing problems with the care of an aging population.

Wastewater Treatment -- With the exception of some densely developed downtown areas the entire region is reliant on septic systems to handle wastewater treatment. While these systems can work effectively, their high density in the region has increased nitrogen loading in lakes and the waters surrounding the region. Resultant algal blooms and other water quality issues threaten fisheries and the region's luster as a vacation destination. The Cape Cod Commission puts the cost of addressing the problem in the billions of dollars over the next 20 years.

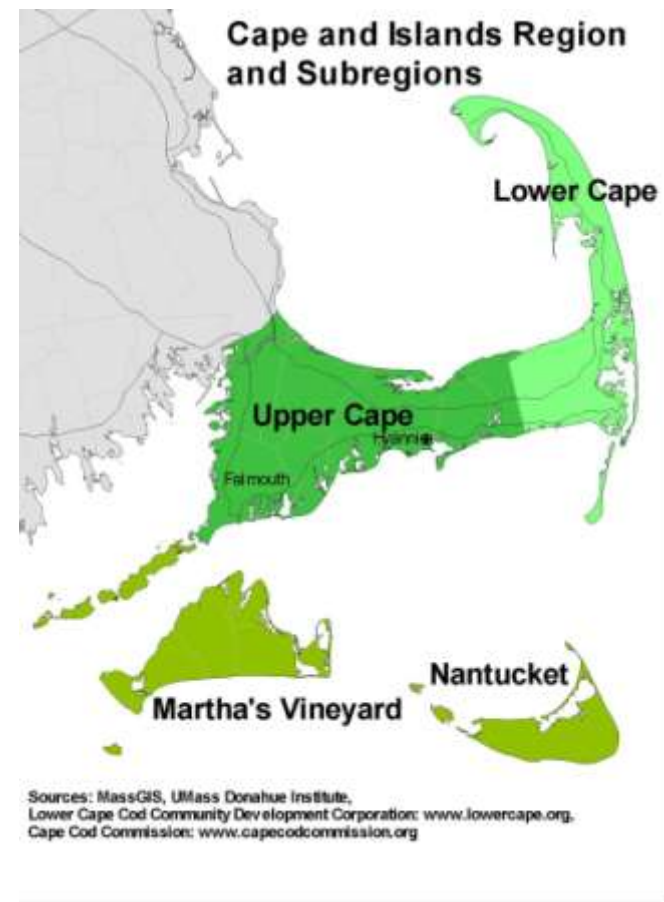
Aquifer Protection -- Development has caused some water quality concerns. The region's septic systems and the aquifer are in close proximity. Nitrogen in the aquifer may be a concern as well as the potential presence of all manner of contaminants in the runoff from impermeable surfaces.



Key Actions for Cape & Islands

Priority Projects of Regional Significance

- Cultivate commercial spin-offs from the Woods Hole Oceanographic Institution and Marine Biological Laboratory. Enhance inter-institutional collaboration with regional partners.
- Modernize wastewater solution systems.
- Support employer-based housing solutions for tourism-related industries.



Regional Snapshot for Cape & Islands

LEADING INDUSTRIES, 2007

Leisure & Hospitality, representing 19.6% of regional employment

Retail, representing 17.5% of regional employment

Healthcare, representing 14.8% of regional employment in 2006*

EMPLOYMENT TRENDS, 2001-2007

Trends in Export-serving Industries:

- Construction grew almost 19.0% to 2006, then declined slightly.
- Financial Services, Professional & Technical Services and IT all showed modest decline
- Manufacturing is in decline, losing more than 27.0%

Trends in Locally-serving Industries:

- Healthcare grew at 17.6% to 2006, and continued to increase to 2007.
- Other sectors showed slow-to-modest growth.

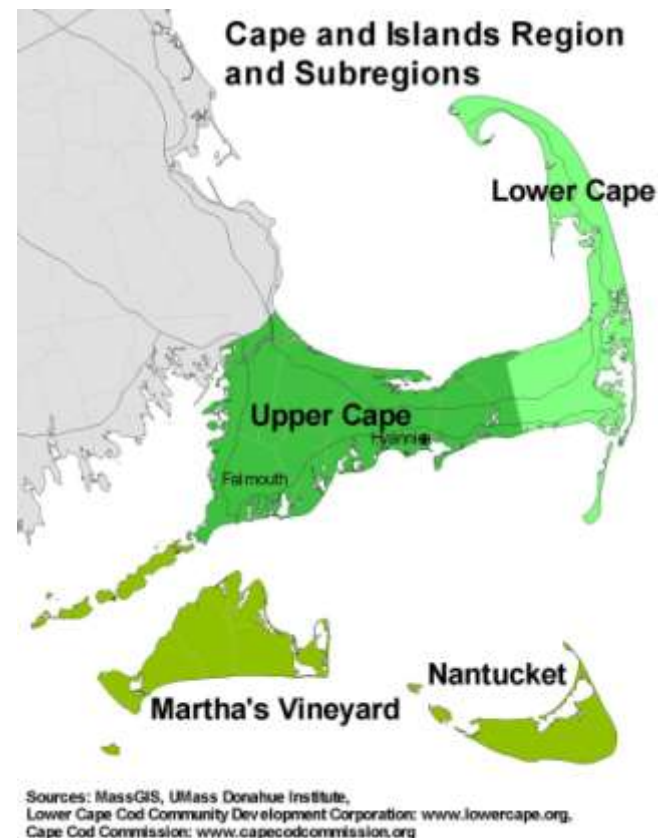
HOUSING TRENDS, 2000-2006

The region had 4.4% of all households in 2006, a 3.4% increase from 2000.

There was a 6.0% increase in homeownership and a 4.1 decline in renters.

There was a 3.4% increase in family households.

*Employment data for the Nursing and residential care facilities sub-sector was suppressed in 2007.



Innovative Capacity for Cape & Islands

NIH AWARDS, 2006

- 25 Awards to totaling \$6,716,688
- 4 institutions received NIH funding
- Marine Biology Laboratory was the largest recipient with \$5,721,833

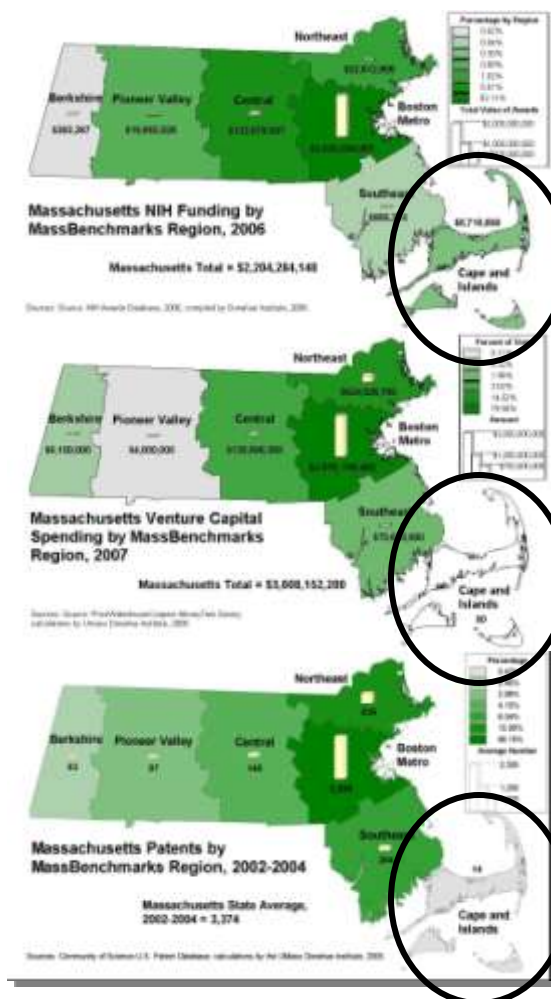
VENTURE CAPITAL FUNDING, 2006

- This region received no venture capital funding in 2006.

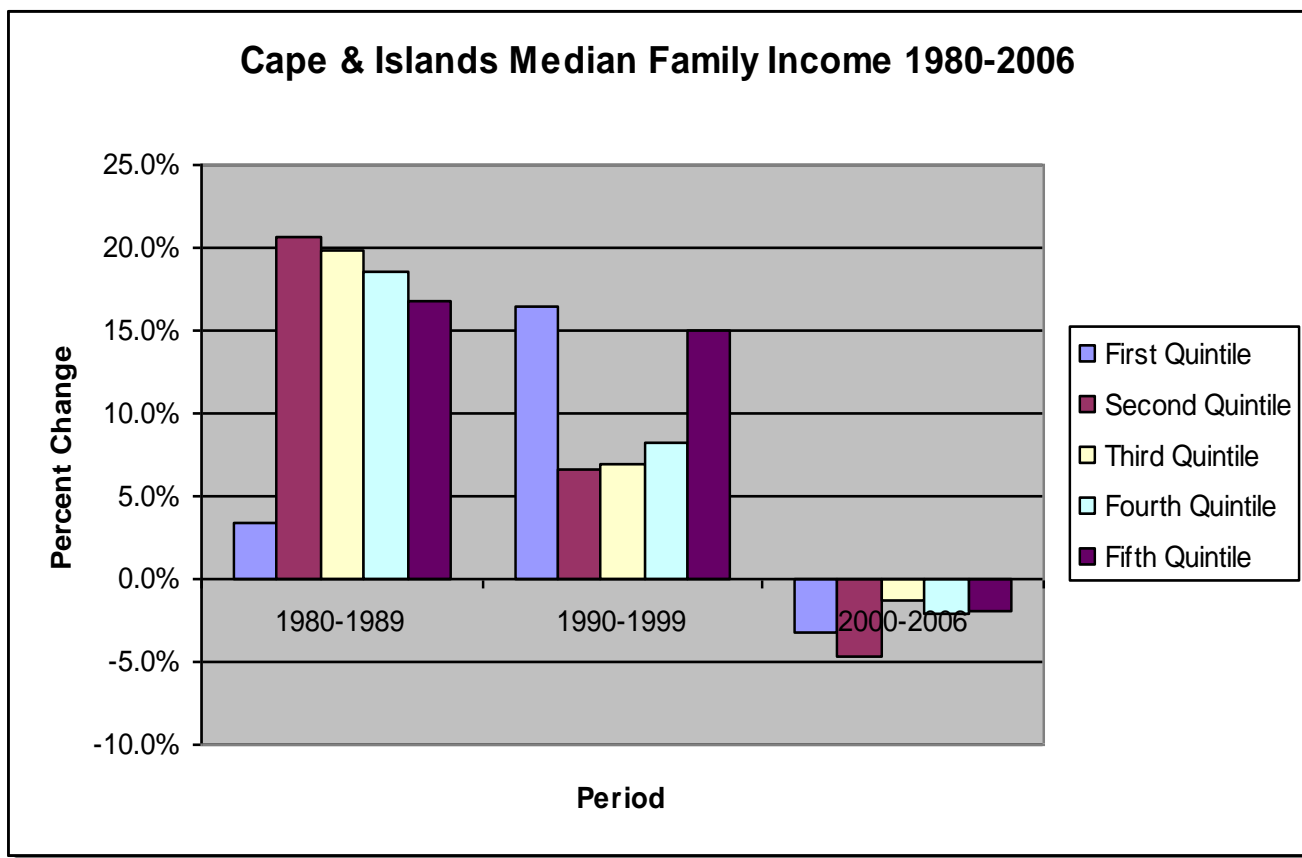
PATENTS, 1973-2004

	1971-1973	2002-2004
State Total	1,130	3,374
Cape and Islands	6	14

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Growing Inequality in the Cape & Islands, 1979-2006



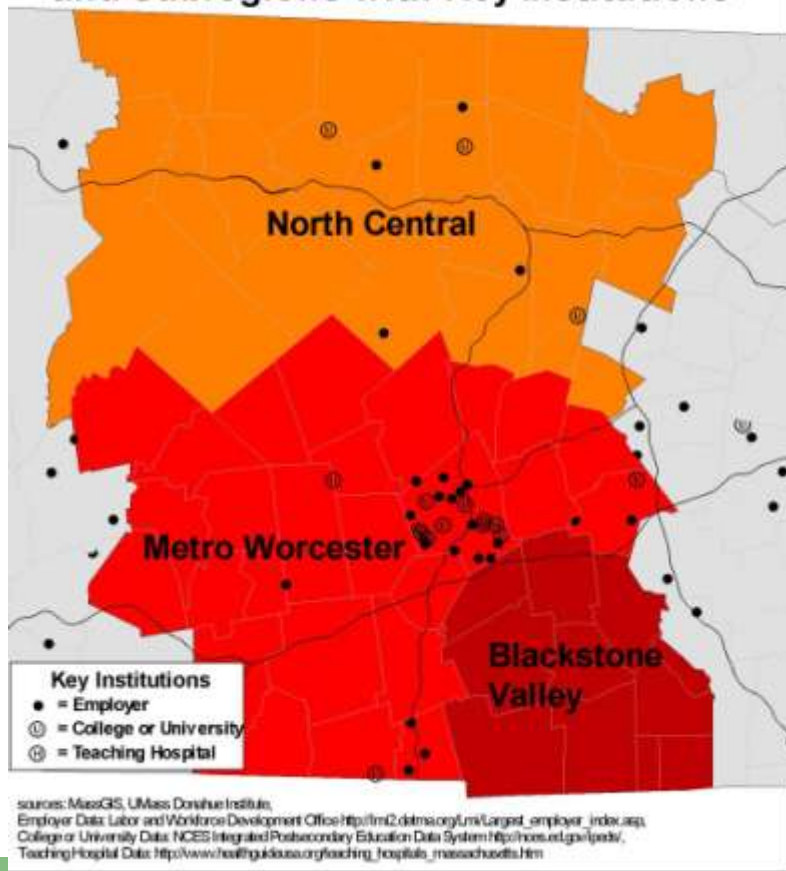
Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.

Analysis - The Cape & Islands had a fairly equitable income growth in the 1980s, with the middle quintiles growing stronger than both the top and bottom fifths. In the 1990s, growth for the middle income quintiles slowed while the top and bottom grew stronger. In fact, during this decade the bottom quintile experienced the strongest growth. In the 2000s, all quintiles have seen income decline, but this decline has occurred at a relatively constant rate across quintiles.



Regional Profile Central Region

MassBenchmarks Central Region and Subregions with Key Institutions



REGIONAL MUNICIPALITIES BY RPA

Central Massachusetts Regional Planning

Commission: City of Worcester; North Subregion – Barre, Holden, Oakham, Paxton, Princeton, Rutland, West Boylston; North East Sub Region – Berlin, Boylston, Northborough, Shrewsbury, Westborough; Southeast Sub Region – Blackstone, Douglas, Grafton, Hopedale, Milbury, Millville, Mendon, Northbridge, Sutton, Upton, Uxbridge; Southwest Sub Region – Auburn, Charlton, Dudley, Oxford, Southbridge, Sturbridge, Webster; West Sub Region – Brookfield, East Brookfield, Hardwick, Leicester, New Braintree, North Brookfield, Spencer, Warren, West Brookfield.

Montachusett Regional Planning Commission:

Ashburnham, Ashby, Athol, Ayer, Clinton, Fitchburg, Gardner, Groton, Harvard, Hubbardston, Lancaster, Leominster, Lunenburg, Petersham, Phillipston, Royalston, Shirley, Sterling, Templeton, Townsend, Westminster, Winchendon, Devens.

Representative Key Institutions and Employers

Clark University
Holy Cross
Fitchburg State College
UMass Medical
WPI
Worcester State College
Commerce Insurance Co
Community Healthlink
Flexcon Corp
Hanover Insurance Group
Healthalliance Behavioral
Leominster Hospital
National Grid USA
New England Financial
Norton Co
Pfpc
Saint-Gobain Plastics



Regional Snapshot for Central

ANALYSIS, Regional Economy

The economy of the region is balanced, with strong employment in locally-serving industries and export industries (Healthcare and Education fall into both categories in this region). The region has experienced population and employment growth between 2000 and 2006. Consequently, there has been an increase in households – including an increase in family households – in the region. There has been growth in industries serving the population growth, such as furniture and home furnishings retail and building material & garden supply stores. Construction also experienced some modest growth.

Manufacturing remains an important share of regional employment despite suffering serious decline. Manufacturing, which in 2007 was the second largest sector in the region, has experienced severe job-loss since 2001. As this sector has declined over the past two decades incomes for the bottom quintile of families has dramatically declined.

Central is the most robustly innovative region outside of Boston Metro and Northeast. Although region firm's collected over \$130 million in venture capital funding in 2006, this represents less than four percent of all such funding statewide for that year. The region does have important institutions that attract NIH funding, such as UMass-Worcester, which received over \$100 million from the NIH in 2006. In fact, UMass-Worcester received more NIH funding than all other institutions combined outside Boston Metro.

Central Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Implications for Central

Cross-Cutting Issues

Scale of Programs – Fiscal/revenue generation incentives that discourage inter-municipal cooperation. Changing the incentives would encourage cooperation but does require revamping how the state funds municipalities. Housing incentives and funding do not match the conditions or needs of many communities. This is an issue for cities like Worcester and Fitchburg who have met their affordable housing requirement and need market rate housing to bring residential balance and economic activity to revitalize their downtowns. For smaller/rural communities, they may not be able to implement programs/tools that have been crafted with the Boston market in mind (e.g. the transit oriented-development overlay district requirements in Chapter 40R).

Rural/Agricultural Policy – In the North Central region, most communities are rural. The regional planning agency expressed the need for policies that preserve the local character while enhancing the economic productivity of rural assets and resources. In Central and Southern regions of Worcester County, regional officials made a similar call to pay policy attention to the communities in the West and North of their planning region which are primarily agricultural.

Marketing – This is a major issue for urban Central MA. Worcester feels slighted by the what they see as the state's Boston-centric economic development focus. They feel there is a need to expand regional marketing to appropriately target and sell the assets, including business development sites, that exist outside of the greater Boston area.

Central Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Implications for Central

Cross-cutting Issues

Educational Attainment – There is a wide variation in the regional levels of educational attainment. Central and Southern Worcester County has higher educational attainment levels with the excellent foundation provided by Worcester and its numerous institutions of higher education. Northern Worcester County contains only two institutions of higher education, Mt. Wachusett Community College and Fitchburg State College, and has a very low level of educational attainment compared to other regions of the Commonwealth.

Energy Prices – This is a major concern across the region but most particularly in the North Central sub-region. There is a keen interest in delving deeper into alternative energy sources. Fitchburg passed a windmill ordinance to allow residential windmills. Mt. Wachusett Community College already has its own alternative energy source.

Youth Retention – The Central region faces the same demographic challenges faced by the Commonwealth. The region's population and workforce are aging and some parts of the region are facing an outright decline in some younger age cohorts. The region faces difficulty in finding enough young workers to fill the workforce of tomorrow and meet the needs of an aging society.

Central Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Implications for Central

Region-specific Issues

Flat export-oriented employment: Devens, parts of Worcester, and Shrewsbury show significant promise (particularly in the Life Sciences, Healthcare and Education) but overall growth is flat. The parts of the region that are growing the most are close to the economic activity along the arc of Interstate 495.

Brownfields – Both Regional Planning Agencies mentioned that current Brownfield funding is not sufficient. It is not clear, however, that there is a market for the parcels that lack adequate funding.

Devens: There is much concern regionally about how to leverage the job growth at Devens. The regional sentiment is that Devens gains at the expense of other locations.

Local Option Tools: There is a need for education of local option tools among towns and cities, particularly in Northern Worcester County MRPC area.

Commuter Rail Improvements and Parking: There is substantial need to enhance service on the Fitchburg Line, continue improvements on the Worcester Line and increase parking at commuter stations (the MRPC gave North Leominster as an example).

Redevelopment of Downtown Worcester: City officials are very focused on the development of City Square, however there are promising projects that are part of the City's Growth District, as well as expansion possibilities led by Worcester's colleges, who are interested in creating a residential downtown for their students.

Water: Availability of water is an issue for some communities in the CMRPC area. Communities are confronted with different challenges: some communities have too little water and constrained budgets; other communities have sufficient water to sell to others but have strict rules that hinder this. The state can help broker resolutions.

Central Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Actions for Central

Priority Projects of Regional Significance

- Rail improvements to the Fitchburg Commuter Rail Line
- Development of the Worcester Growth District
- Expansion of Life Sciences facilities at the UMass Worcester Medical School
- Development of City Square in Worcester
- Expansion of Commuter Rail service to Worcester
- Route 2 improvements designed to mitigate congestion
- Continuing the build-out of Devens



Regional Snapshot for Central

LEADING INDUSTRIES, 2007

- Healthcare, representing 16.1% of regional employment
- Manufacturing, representing 13.2% of regional employment
- Retail, representing 11.9% of regional employment

EMPLOYMENT TRENDS, 2001-2007

Trends in Export-oriented Industries:

- Healthcare and Education experienced strong growth of 9-10%.
- Leisure & Hospitality, which represents 9% of regional employment, grew by 13.3%.
- Manufacturing is in decline, losing 20.5% of its workforce.
- IT declined by over 10%.

Trends in Locally-serving Industries:

- Healthcare and Education experienced strong growth.
- Construction experienced modest growth.
- Financial Services experienced modest decline.
- Professional & Technical Services declined by over 9%.

HOUSING TRENDS, 2000-2006

- The region had 11.7% of all households in 2006, representing 1.5% growth since 2000.
- There was a 7.1% increase in homeownership and a 8.2% decline in renters.
- There was 1.5% increase in family households.

Central Region and Subregions



Source: MassGIS, UMass Donahue Institute



Innovative Capacity for Central

NIH AWARDS, 2006

- 340 Awards to totaling \$123,679,697
- 14 institutions received NIH funding
- UMass Medical School was the largest recipient with \$107,859,776

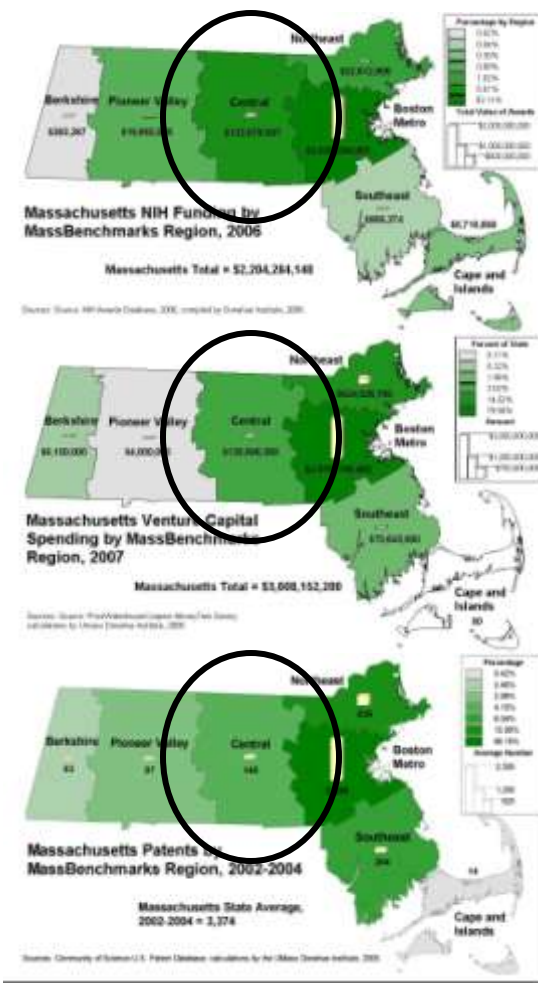
VENTURE CAPITAL FUNDING, 2006

- \$130,596,300 or 3.62% of all VC funding in Massachusetts went to firms in this region
- The largest industries receiving VC funding were
 - Software, with 60.0% of the regional total
 - Electronics/Instrumentation, with 28.7% of the regional total

PATENTS, 1973-2004

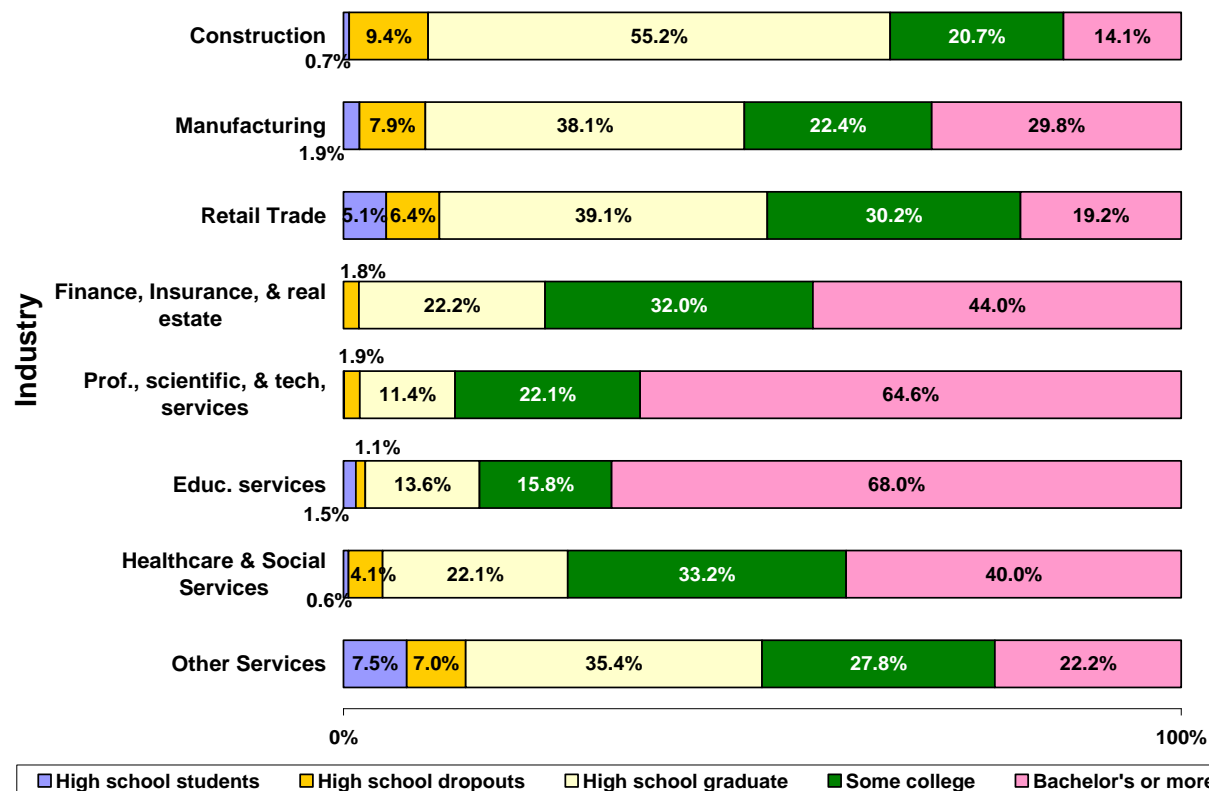
	1971-1973	2002-2004
State Total	1,130	3,374
Central	147	140

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Educational Attainment for Central WIB

DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006

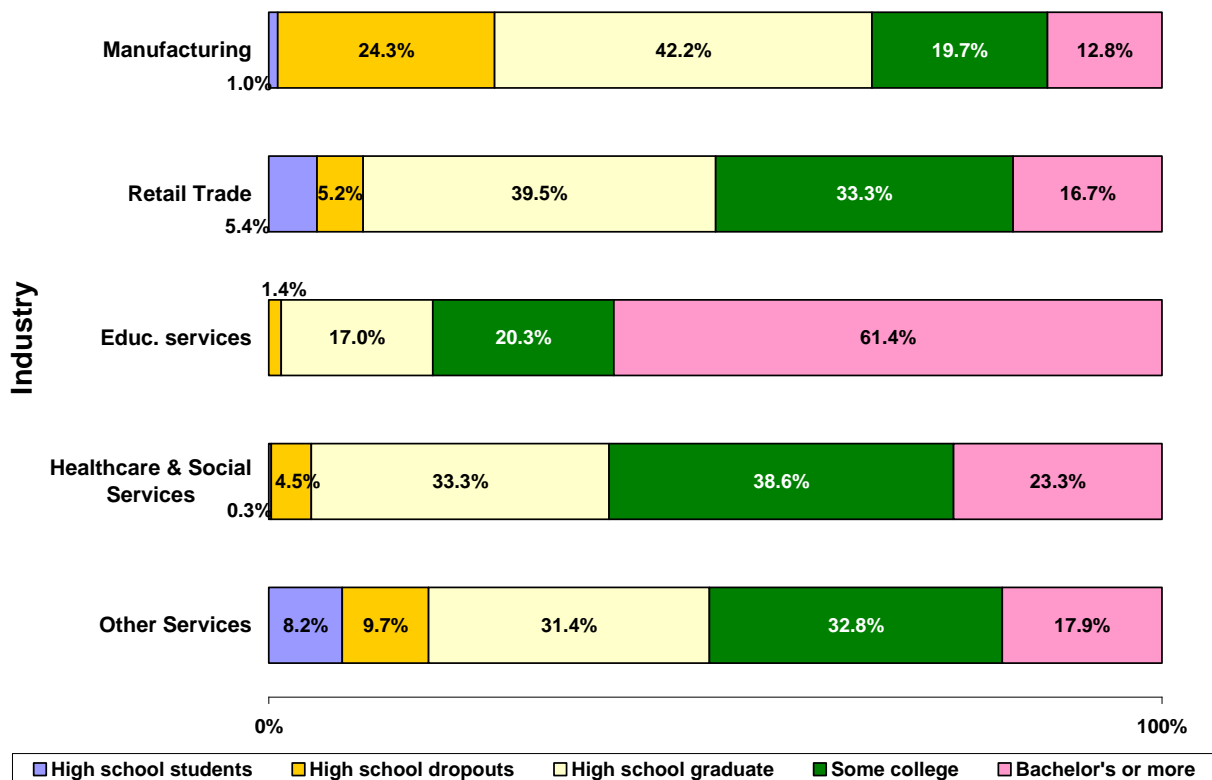


Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Educational Attainment for North Central WIB

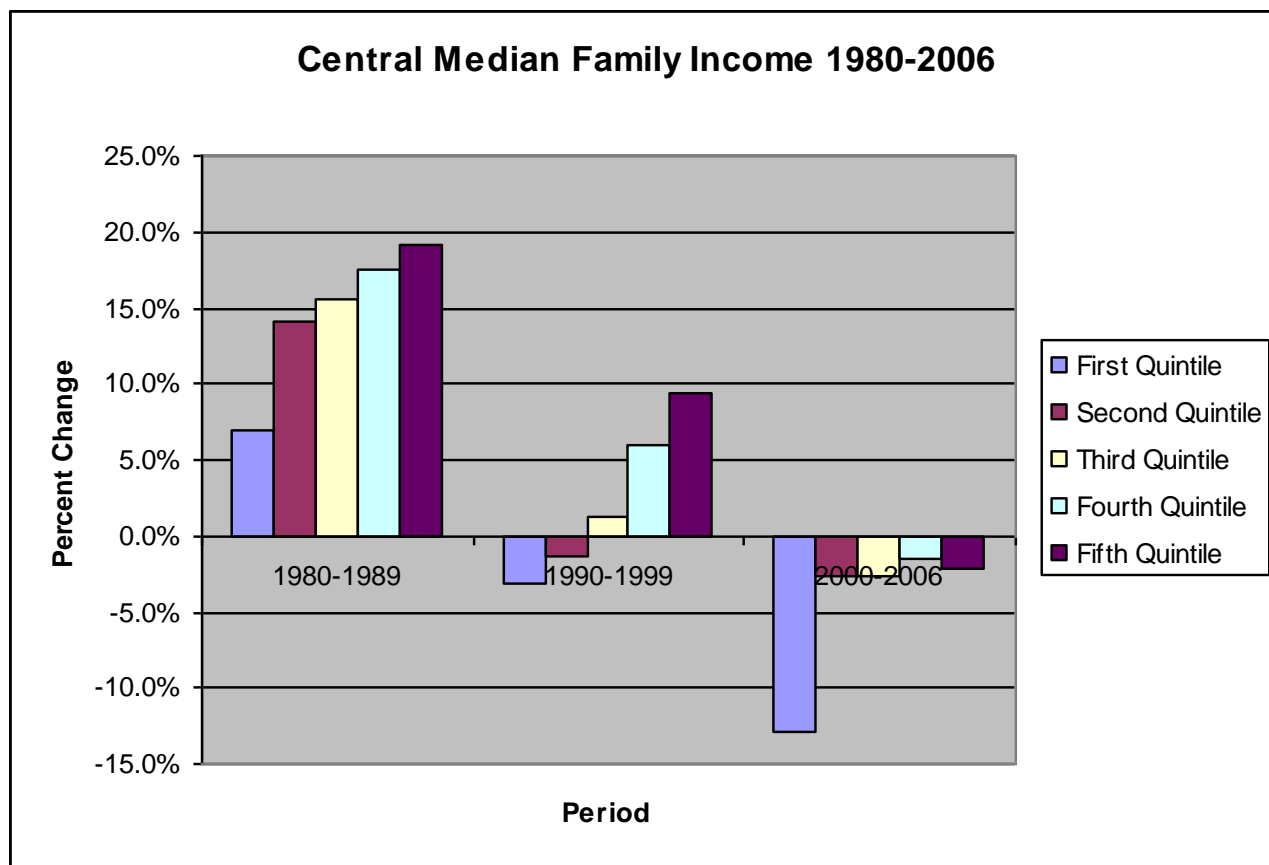
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Growing Inequality in the Central Region, 1979-2006



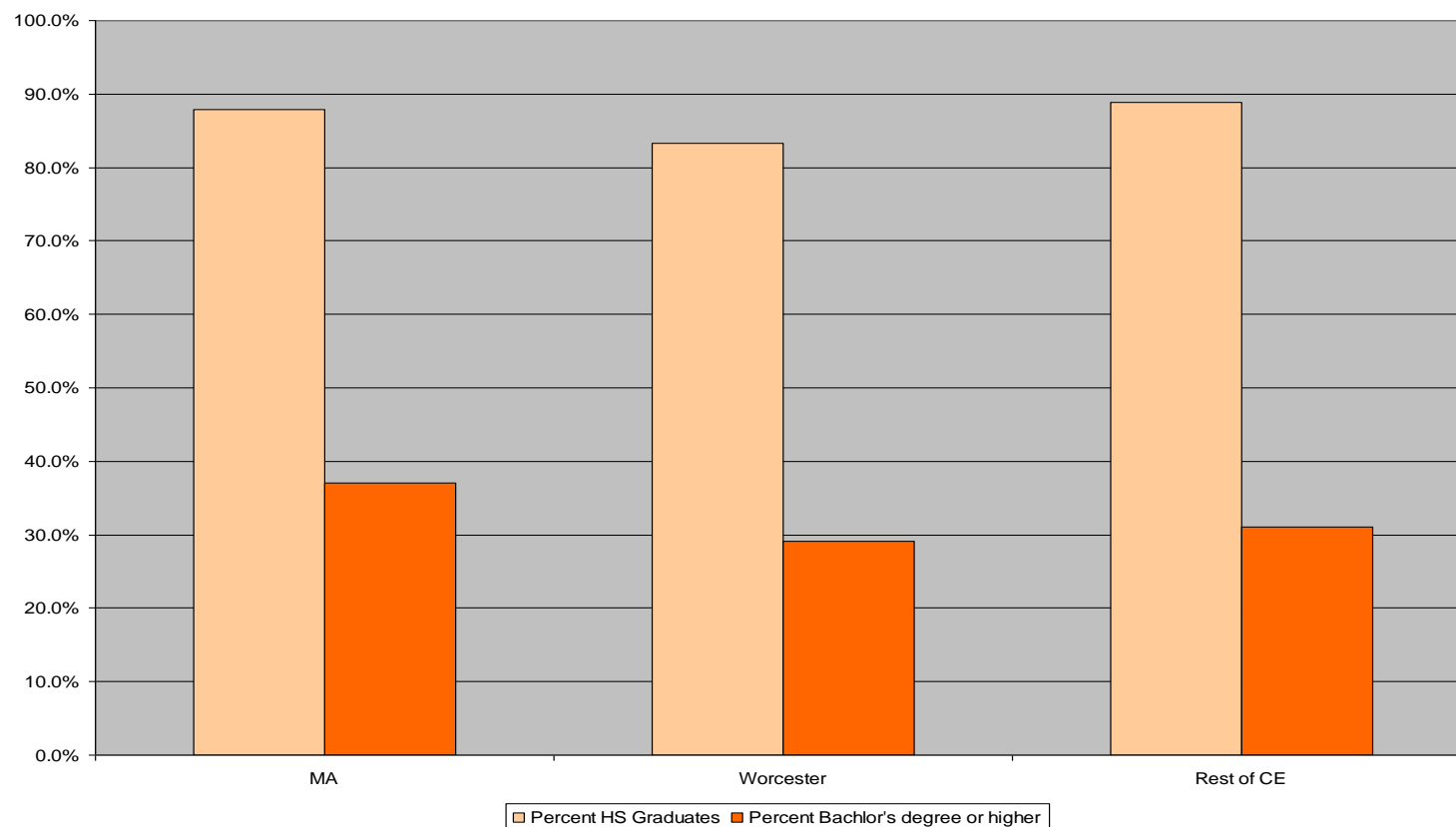
Analysis - Income growth was fairly evenly distributed during the 1980s. Also the growth in all but the lowest quintile exceeded 10%, with the top three exceeding 15%. In the 1990s, income growth slowed and the bottom two quintiles experienced loss. All sectors declined in the 2000s, with the lowest quintile experience significant decline.

Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.



Educational Attainment in Central

EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006



Source: U.S. Bureau of the Census, 2006 ACS.



Regional Profile Northeast Region

MassBenchmarks Northeast Region
and Subregions with Key Institutions



REGIONAL MUNICIPALITIES BY RPA

Northern Middlesex Council of Governments: Billerica, Chelmsford, Dracut, Dunstable, Lowell, Pepperell, Tewksbury, Tyngsborough, Westford

Merrimack Valley Planning Council: Amesbury, Andover, Boxford, Georgetown, Groveland, Haverhill, Lawrence, Merrimack, Methuen, Newbury, Newburyport, North Andover, Rowley, Salisbury, West Newbury

Metropolitan Area Planning Council: Beverly, Danvers, Essex, Gloucester, Hamilton, Ipswich, Lynnfield, Manchester, Marblehead, Middleton, North Reading, Reading, Rockport, Salem, Topsfield, Wakefield, Wenham, Wilmington

Representative Key Institutions and Employers

North Shore Community College

Northern Essex Community College

Salem State College

University of Massachusetts-Lowell

Alcatel-Lucent

Analog Devices Inc

Anna Jaques Hospital

Bay State Gas Co

Caritas Holy Family Hospital

Changepoint Inc

Idearc Media

Lawrence General Hospital

Marblehead Ace Hardware

North Shore Medical Center

Northeast Health Systems Inc

Polartec LLC

Raytheon Integrated Defense

Seacoast Lock & Safe Co Inc



Regional Snapshot for Northeast

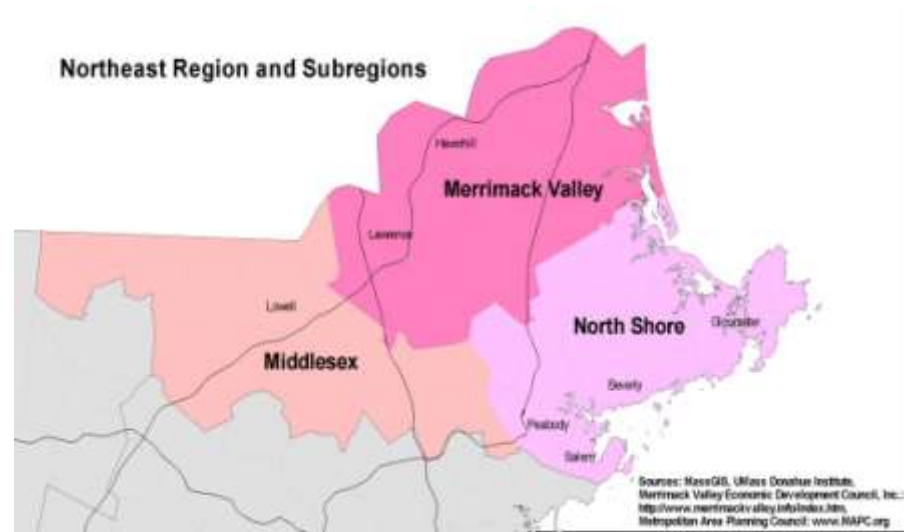
ANALYSIS, Regional Economy

The regional economy is fairly diverse with much smaller differences in regional share of employment among sectors than in most other regions. Although Manufacturing is the single largest sector in the Northeast, it has declined faster than most other regions. There were small-to-modest gains in four Manufacturing industries – including Food Manufacturing, which has been noted as a targeted industry for economic development by regional experts – but this did not mitigate losses elsewhere.

Education and Healthcare both grew strongly since 2001. However, job growth in knowledge creation sectors was not uniform. Information Technology lost just under a quarter of its workforce between 2001 and 2007. Unlike trends in some other regions, this decline has been consistent from 2001-2004 and 2004-2006.

The region experienced a very small decline in households between 2000 and 2006. Despite this there was growth in some Retail industries associated with residential construction between 2001 and 2007. However, there was an overall decline in the Retail sector of over five percent.

The region ranks second behind Boston Metro among indicators of innovative capacity. Regional firms collected over half a billion dollars in venture capital funding in 2006. NIH funding for the region was over \$22 million, with half of that going to the Agencourt Bioscience Corporation.



Key Implications for Northeast

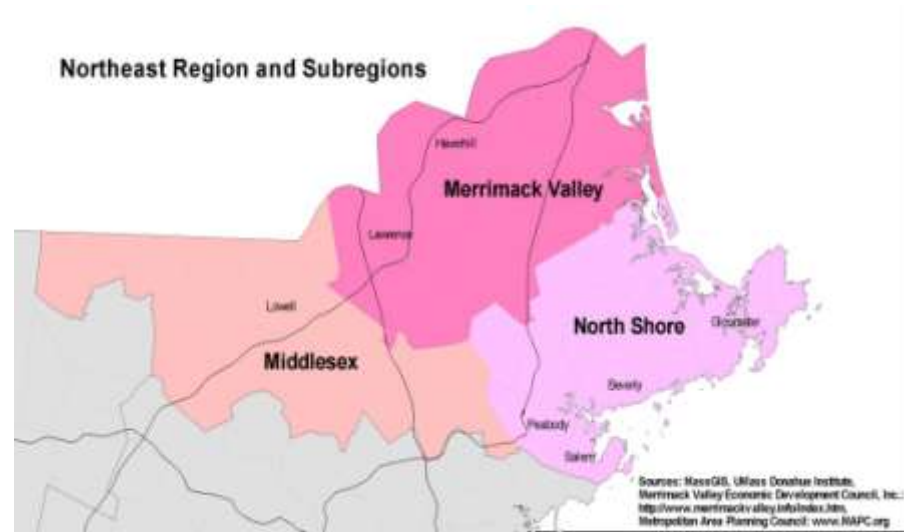
Cross-Cutting Issues

Scale of Programs – Smaller communities expressed concern that state programs require a level of staff capacity that they are unable to maintain. This concern was echoed in Haverhill, a larger community.

Workforce Development – This is a primary issue for cities, especially Lawrence, where up to a quarter of households are linguistically isolated.

Educational Attainment – As elsewhere in the state, suburban communities have education issues, whereas urban areas confront a serious challenge, with drop-out rates a problem in Lawrence and to some extent Lowell.

Youth Retention – This is not as pressing an issue as in other regions that are facing an absolute decline in the working age population, though the retention of “knowledge workers” is a critical issue for the region’s employers in growth sectors. The challenge to the region is not growing its youth population, it is expanding the number of educated and skilled youth in the region’s cities.



Key Implications for Northeast

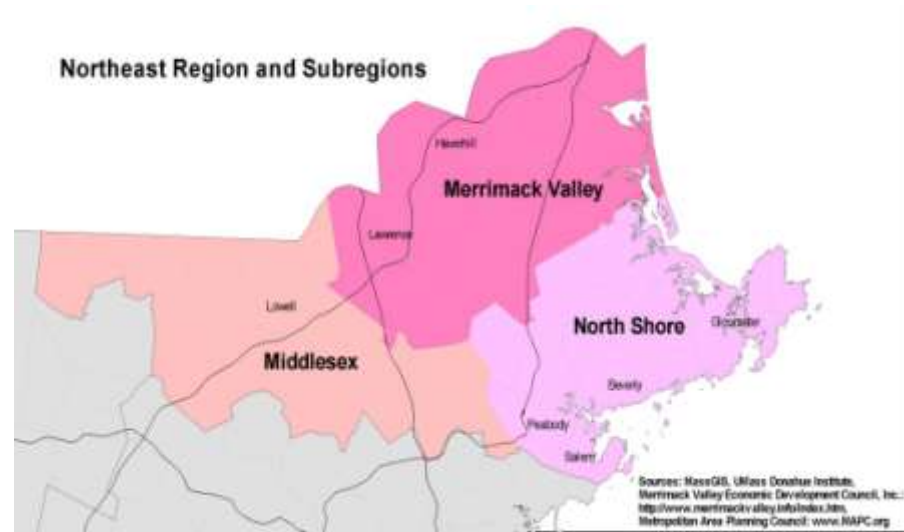
Region-specific Issues

Emerging Creative Economy – Both the North Shore and Lowell have invested in significant efforts to grow their creative economies.

Pockets of Distress – Within the urban populations of the Northeast are particularly challenged “pockets of distress.” The immigrant populations in particular have a hard-go. Language and educational attainment are big barriers of entry to the workforce.

Downtown Development Strategies – Each of the three river cities plus Gloucester and Salem are engaged at various stages in a residentially-driven strategy to revitalize their downtowns. The catalyst is to encourage urban residential development in converted mill space through zoning relief and urban amenities, which should create a market for retail/commercial development once the customers/workers are in place. *Structured Parking* was a reoccurring theme in discussions about downtown developments. While the cities had plenty of surface lots, they all made a case for structured parking to support transit, retail, and residential uses in the downtown.

Housing Stock – While there appears to be sufficient affordable housing in the urban areas, its quality is unclear. One informant suggested that “sick houses” were contributing to school/work absenteeism. Rehabilitation of older homes is a major need, especially in the inventory of vacant, foreclosed and tax-title properties.



Key Implications for Northeast

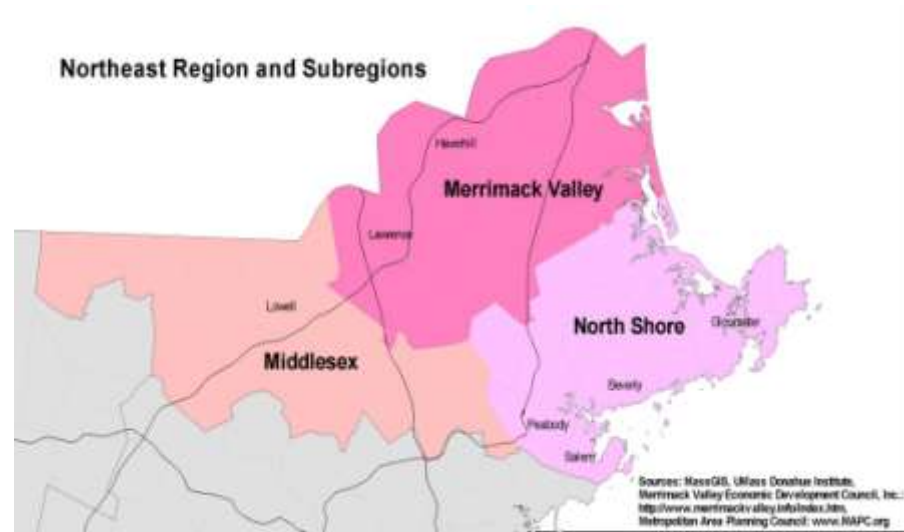
Region-specific Issues

Foreclosures – The first problem is effectively assisting homeowners who are faced with delinquencies on their mortgages or are in foreclosure. The second problem is the impact of specific vacant properties on neighborhood stability – state and federal resources need to be effectively deployed to acquire and redevelop strategic properties. Multiple strategies are currently in use by the state to improve homeowner and new-homebuyer education and put in place protections and services.

Aging Infrastructure – Bridges are a major issue in the region, both in maintaining the current stock (12 structurally deficient, 38 functionally obsolete in the NMCOG sub-region) and need for additional capacity. In the NMCOG sub-region, we heard that sewer capacity for the communities surrounding Lowell was maxed out—limiting their ability to host industry.

Transit – There are significant regional transportation bottlenecks and problems with service to between communities to regional job centers.

Lack of Regionalism – Regional and municipal leaders primarily identify themselves in relationship to a north-south corridor connecting back to Boston Metro or to the more suburban job centers (Andover, Billerica). They do not readily accept the common definitions of the region used by the regional planning agencies and regional collaboration is minimal, with some notable and growing exceptions, as with the region's colleges and UMass Lowell, for example.



Key Actions for Northeast

Priority Projects of Regional Significance

- Double-tracking the rail to Haverhill and adding cars during peak times.
- Lowell Junction interchange
- Hamilton Canal in Lowell
- Lowell NPS trolley extension as a lynch-pin to their downtown strategy.
- Expansion of Commuter Rail to Manchester (NH) Airport
- North Andover and Lawrence' development of the Airport Industrial Park
- Golden Triangle Industrial Park in Amesbury and Salisbury
- Lawrence Gateway Project
- Groveland Downtown Revitalization
- Haverhill Downtown Revitalization
- Amesbury Downtown Revitalization
- Rte. 3 expansion and bridge improvements



Regional Snapshot for Northeast

LEADING INDUSTRIES, 2007

Manufacturing, representing 16.4% of regional employment

Healthcare, representing 14.0% of regional employment

Retail, representing 10.7% of regional employment

EMPLOYMENT TRENDS, 2001-2007

Trends in Export-oriented Industries:

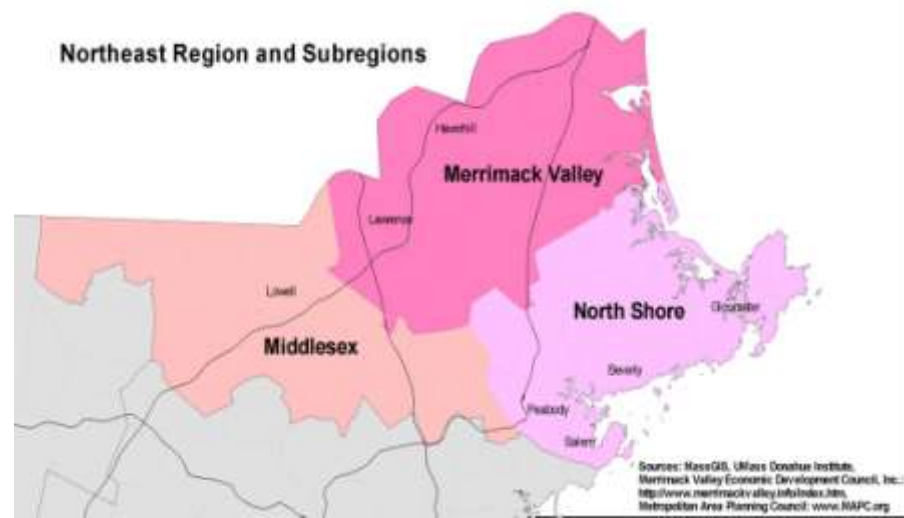
- Growth in Knowledge Creation sectors
- Manufacturing is in decline, losing more than 25%
- IT is also in decline, losing just under 25% of the workforce. Unlike trends in some other regions, this decline has been consistent from 2001-2004 and 2004-2006.

Trends in Locally-serving Industries:

- Retail growth associated with residential construction, but otherwise a decline of over five percent in this sector.

HOUSING TRENDS, 2000-2006

- The region had 14.0% of all households in 2006, representing a decline of 0.2% since 2000.
- There was a 3.8% increase in homeownership and a 8.2% decline in renters.
- Family households declined by 0.2%.



Innovative Capacity for Northeast

NIH AWARDS, 2006

- 39 Awards to totaling \$22,512,905
- 16 institutions received NIH funding
- Agencourt Bioscience Corporation was the largest recipient with \$11,528,372

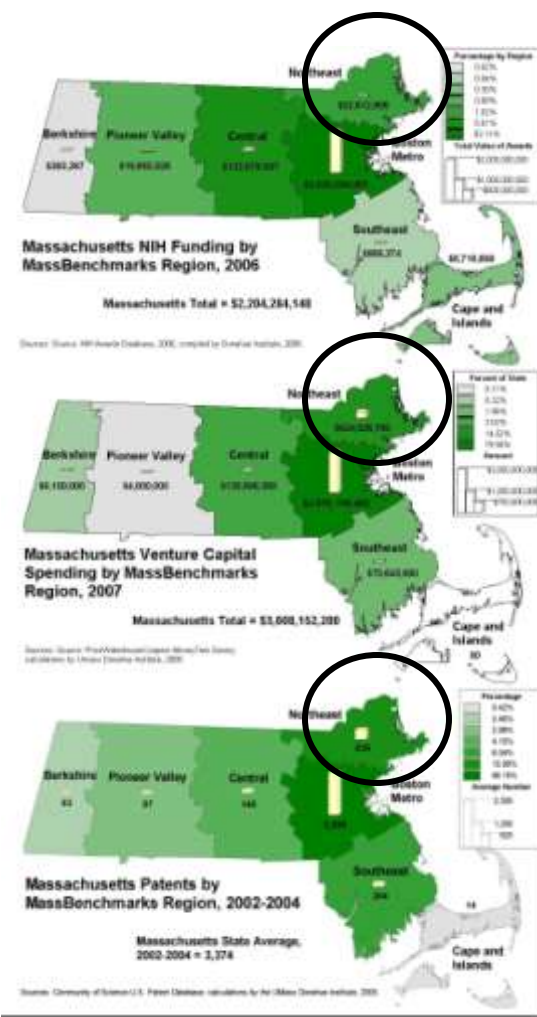
VENTURE CAPITAL FUNDING, 2006

- \$524,025,700 or 14.52% of all VC funding in Massachusetts went to firms in this region
- The largest industries receiving VC funding were
 - Medical Devices and Equipment, with 22.72%
 - Semiconductors, with 15.21%

PATENTS, 1973-2004

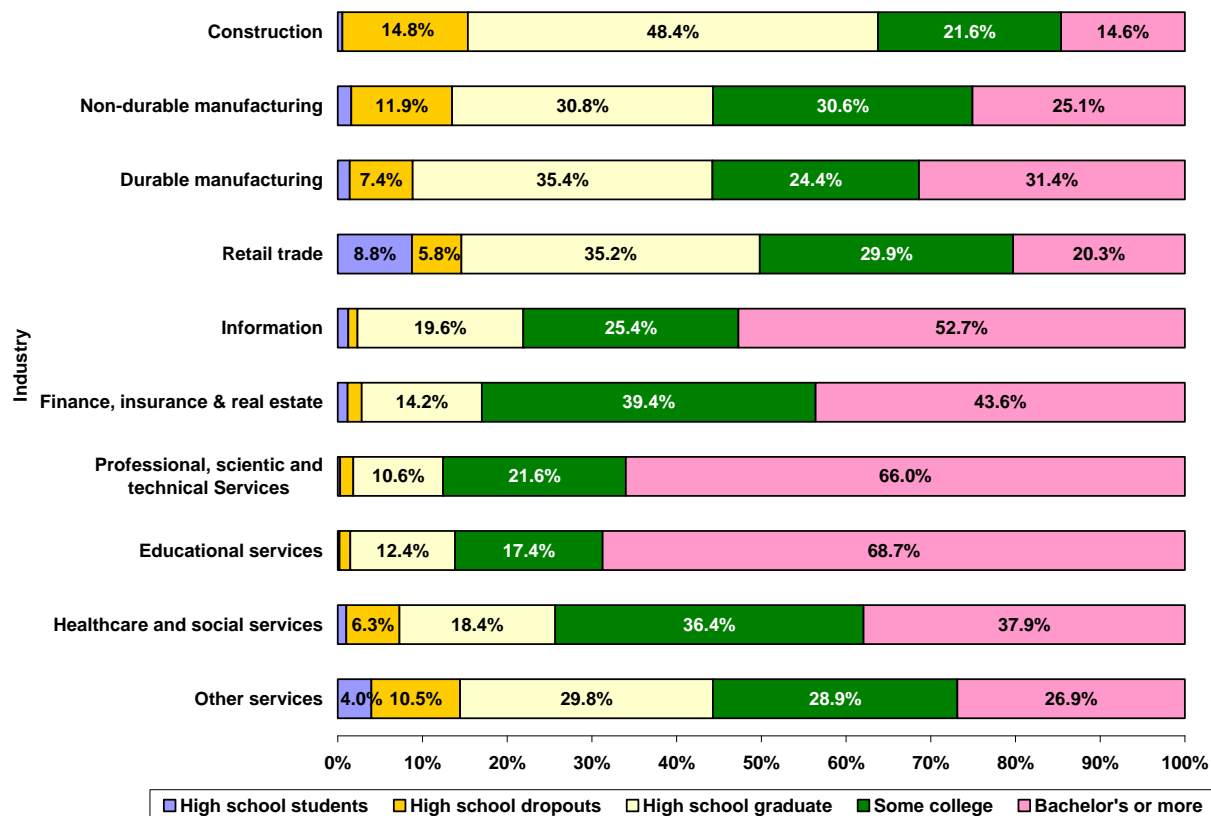
	1971-1973	2002-2004
State Total	1,130	3,374
Northeast	77	538

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Educational Attainment for North Shore WIB

DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006

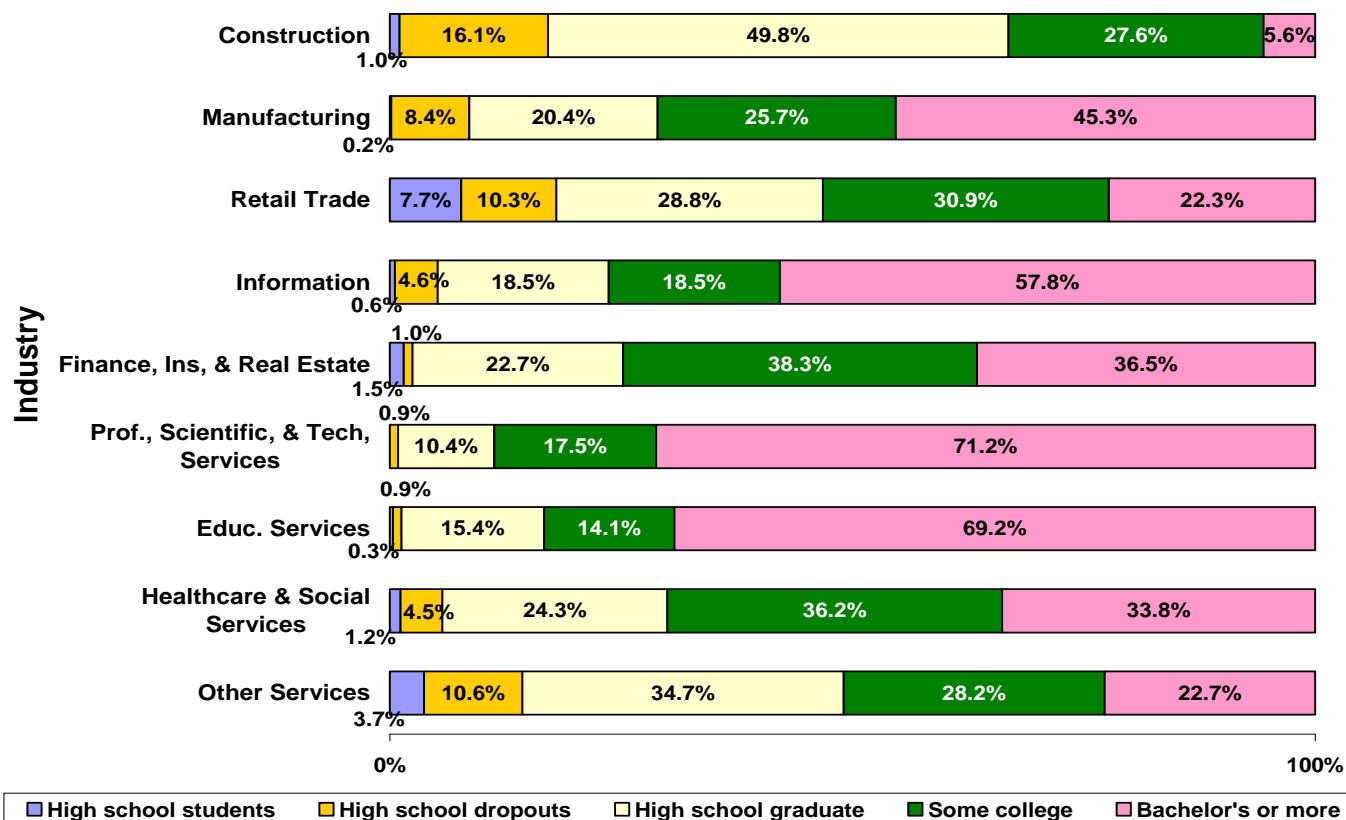


Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Educational Attainment for Greater Lowell WIB

DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006

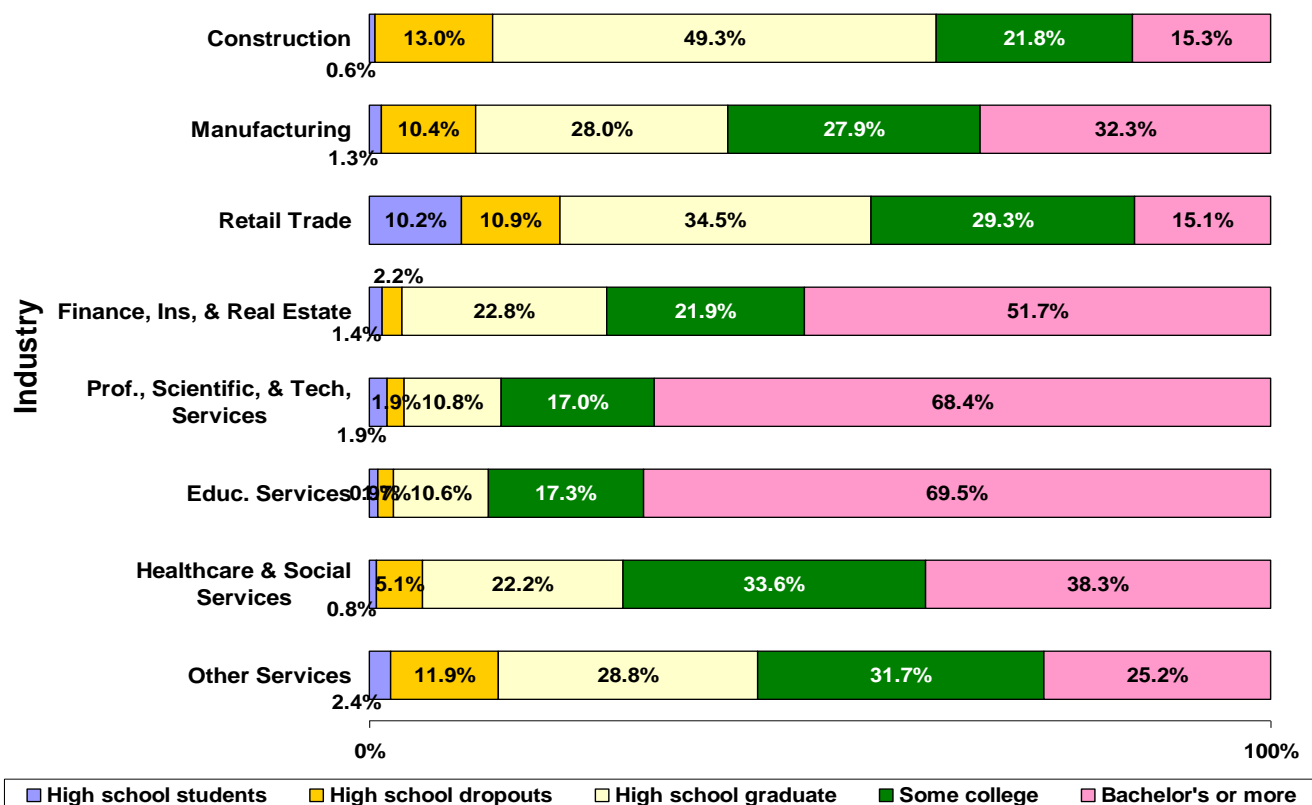


Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Educational Attainment for Merrimack Valley WIB

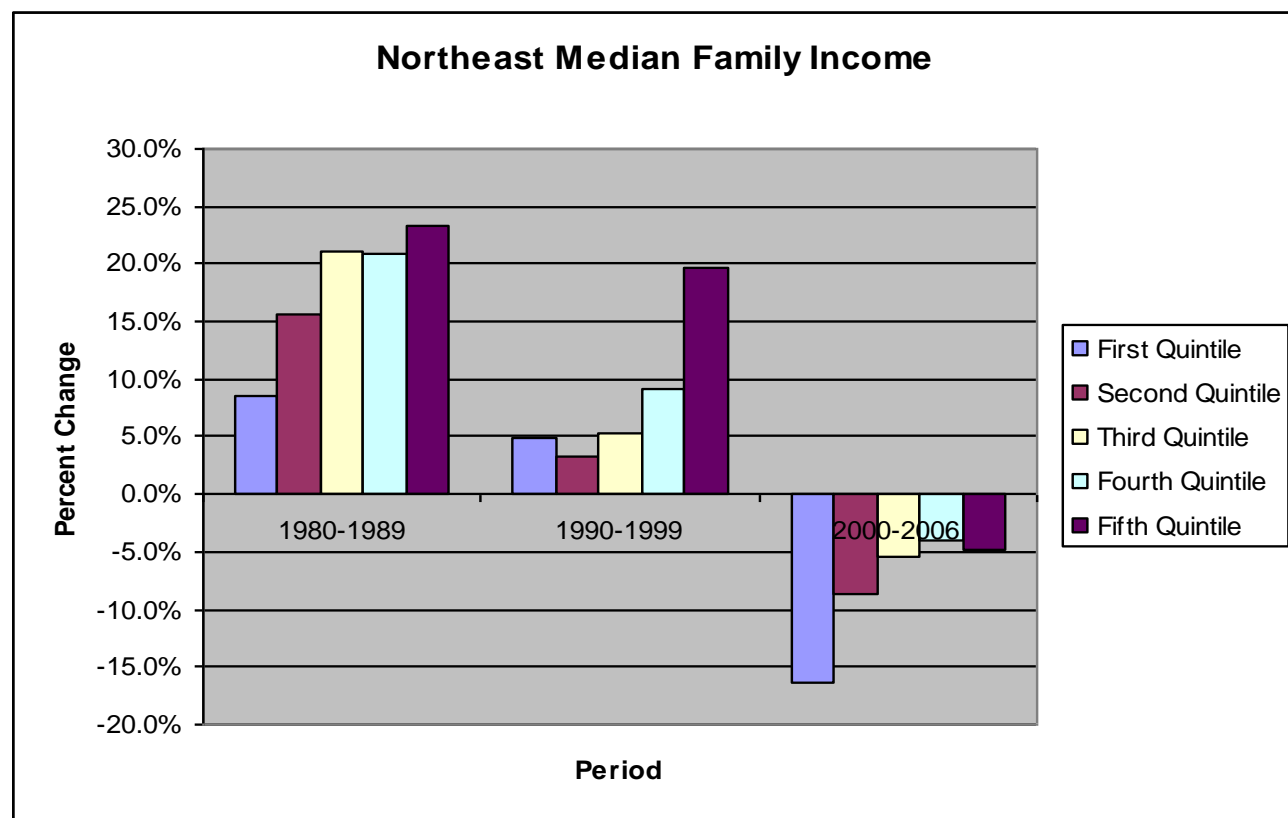
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Growing Inequality in the Northeast Region, 1979-2006



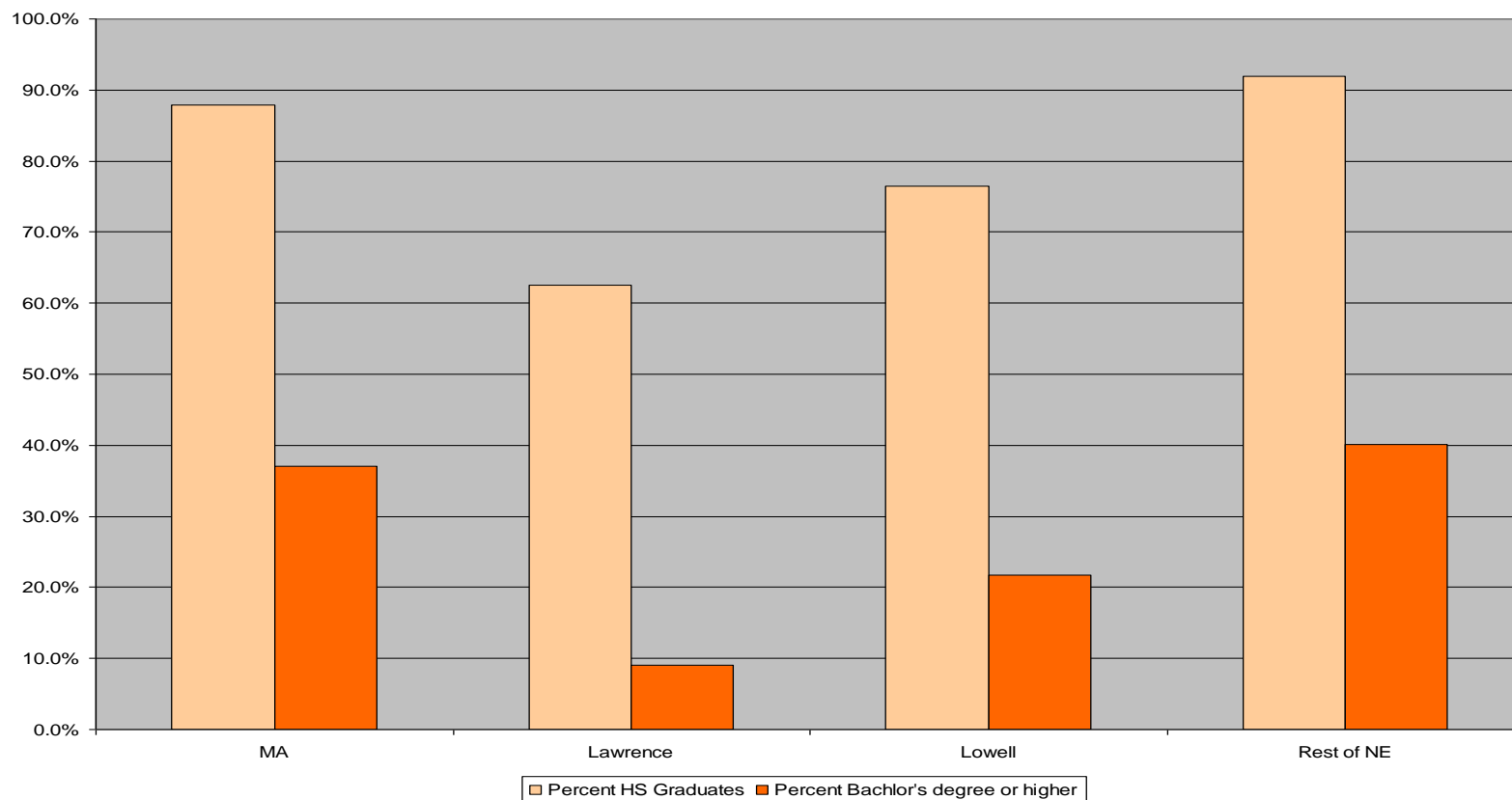
Analysis - Northeast's income growth picture is similar to that of the state and Boston Metro. Although the top quintile has grown significantly since 1989, it has actually declined – along with all other quintiles – since 1999.

Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.



Educational Attainment in Northeast

EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006

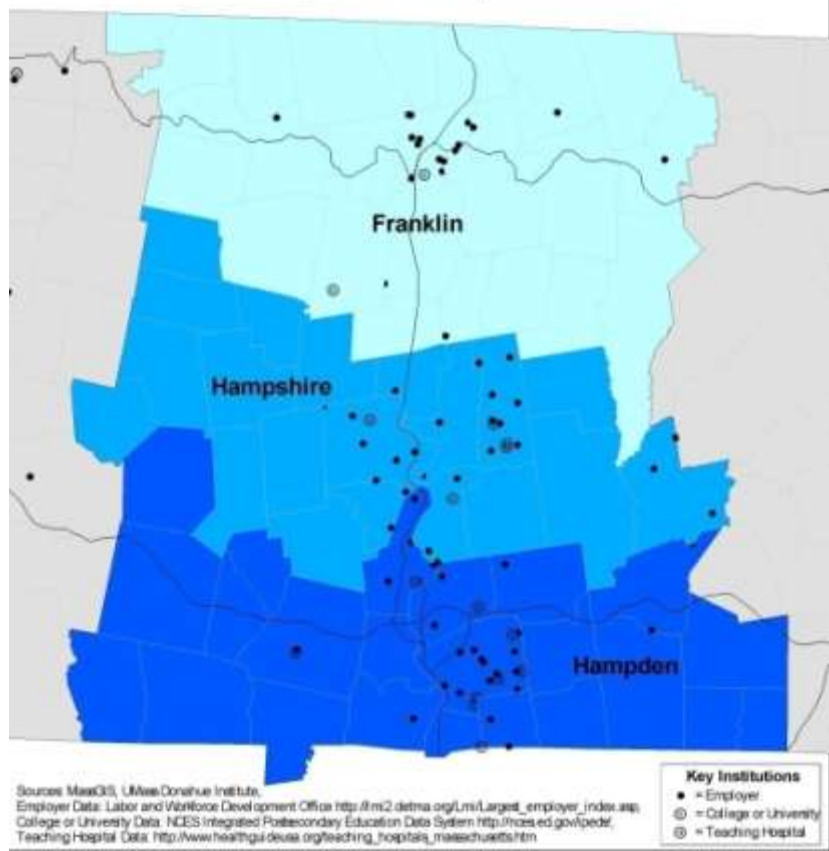


Source: U.S. Bureau of the Census, 2006 ACS.



Regional Profile Pioneer Valley

**MassBenchmarks Pioneer Valley Region
and Subregions with Key Institutions**



REGIONAL MUNICIPALITIES BY RPA

Franklin Regional Council of Governments:

Ashfield, Bernardston, Buckland, Charlemont, Colrain, Conway, Deerfield, Erving, Gill, Greenfield, Hawley, Heath, Leverett, Leyden, Monroe, Montague, New Salem, Northfield, Orange, Rowe, Shelburne, Shutesbury, Sunderland, Warwick, Wendell, Whately

Pioneer Valley Planning Commission:

Agawam, Amherst, Belchertown, Blandford, Brimfield, Chester, Chesterfield, Chicopee, Cummington, East Longmeadow, Easthampton, Goshen, Granby, Granville, Hadley, Hamden, Hatfield, Holland, Holyoke, Huntington, Longmeadow, Ludlow, Middlefield, Monson, Montgomery, Northampton, Palmer, Plainfield, Pelham, Russell, South Hadley, Southampton, Southwick, Springfield, Tolland, Wales, Ware, West Springfield, Westfield, Westhampton, Wilbraham, Williamsburg, Worthington

Representative Key Institutions and Employers

American International College
Amherst College
Greenfield Community College
Holyoke Community College
Smith College
Springfield College
Springfield Tech Comm College
UMass-Amherst
Western New England College
Westfield State College
Baystate Medical Center
C & S Wholesale Grocers Inc
Cooley Dickinson Hospital
Hasbro Games
Massachusetts Mutual Life Ins
Mercy Medical Center
Northeast Utilities
Yankee Candle Co Inc



Regional Snapshot for Pioneer Valley

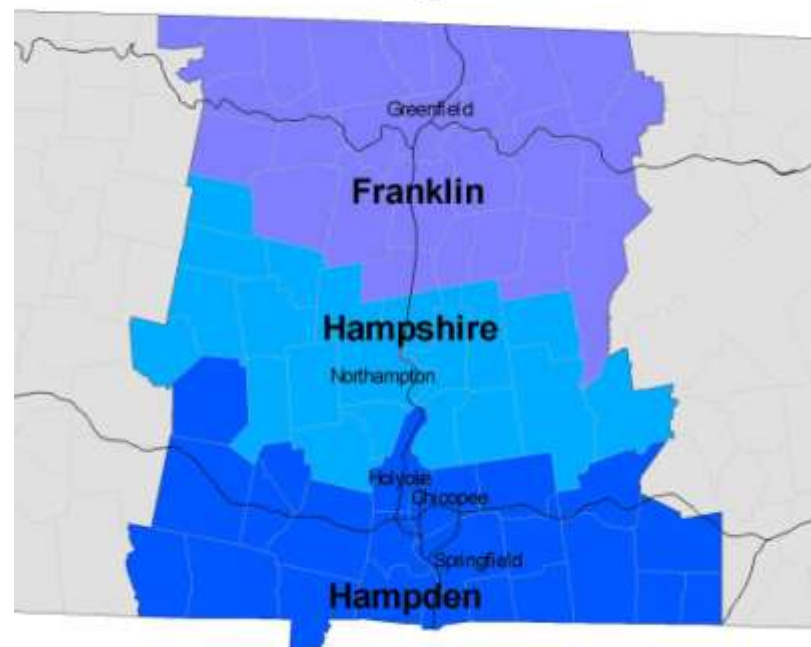
ANALYSIS, Regional Economy

The economy of the region is fairly balanced, which is the result of several large institutional employers in the region, such as UMass-Amherst, Baystate Medical, and Mass Mutual, maintaining a stable employment base. Education and Healthcare are the fastest growing sectors in the region. The region has experienced modest population growth between 2000 and 2006, with the notables exceptions of Holyoke and Springfield. However, there was a very small decline in households between 2000 and 2006.

Despite a fairly balanced economy, the region has seen decline in many sectors since 2001. Information Technology lost nearly a quarter of its workforce, and Financial Services and Professional & Technical Services both experienced losses. Manufacturing remains an important share of regional employment despite losing one of every five jobs in the sector since 2001. However, Chemical Manufacturing and Computer and Electronic Product Manufacturing have shown gains. Precision Manufacturing, particularly in Hampden County, is a vital and competitive industry. Even with a decline of over 21%, Manufacturing remains just behind Retail as the fourth largest sector.

Despite having some strong institutional actors, the region received almost no venture capital funding in 2006. UMass-Amherst received over \$17 million in NIH funding that year, which is less than 1/5 of the amount received by UMass-Worcester in the same year.

Pioneer Valley Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Implications for Pioneer Valley

Cross-Cutting Issues

Scale of Programs – Local experts argue that state programs seem designed for the Boston metro region. Only the largest cities in the Pioneer Valley have the requisite size and technical sophistication to take full advantage of state programs. Administrative requirements are frequently seen as onerous.

Rural/Agricultural Policy – Hampshire and Franklin counties still have large rural areas, with significant agricultural resources. The region does, however, face relentless pressure for sprawling development despite a slowly growing population.

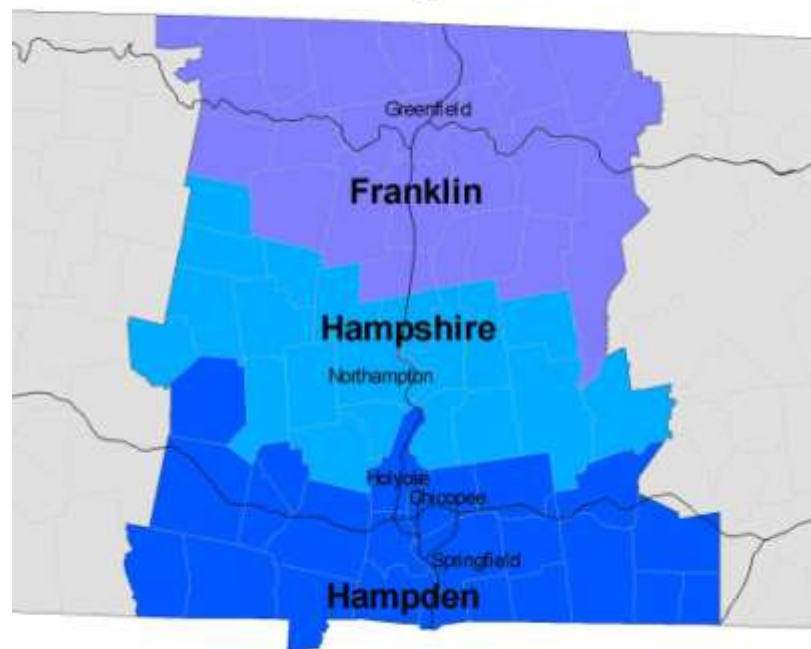
Broadband – Many local communities in the Pioneer Valley do not have any broadband service. This is a major economic and community development challenge for the region.

Workforce Development – The Valley has a high percentage of its job base in traditional manufacturing industries and growth in healthcare employment. There is a critical need to connect adult learners, especially in the region's cities, to growth industries through adult basic education and employer-based training programs.

Educational Attainment – Schools in the region's cities struggle with low outcomes, have a high percentage of students who qualify for the school lunch program, and have a high and rising dropout rate. The region's colleges and university produce many graduates but the region has historically struggled to retain graduates.

Youth Retention – Although the region's overall population is growing slightly, the Valley is suffering an out-migration of young people. There is a 'chicken-and-egg' quality to the debate over how to retain young educated workers in a region with few growing job sectors. More robust job growth and efforts to link new graduates to job experiences in the region are both necessary priorities.

Pioneer Valley Region and Subregions



Source: MassGIS, UMass Donahue Institute



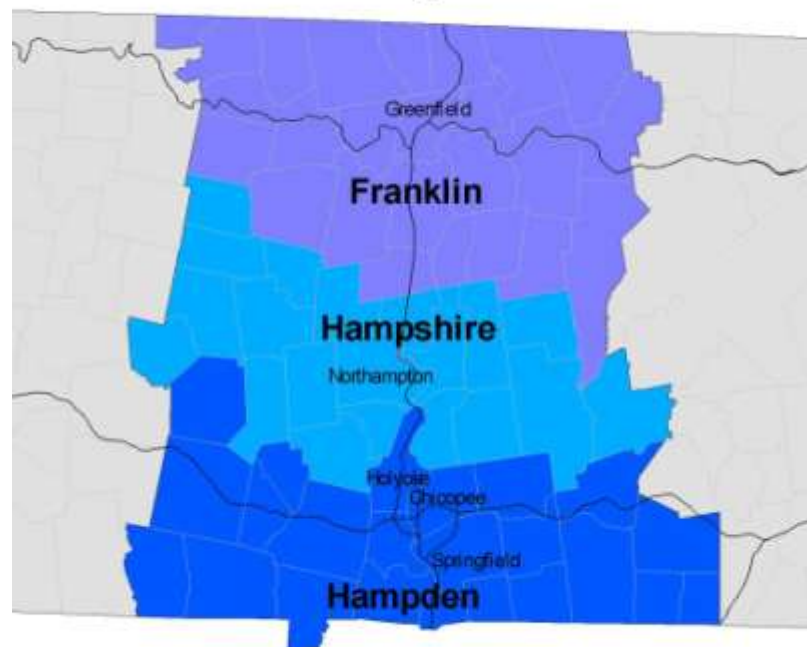
Key Implications for Pioneer Valley

Region-specific Issues

Integrating UMass and Colleges into the Regional Economy – The Pioneer Valley has a significant concentration of colleges and a major research university but hasn't done a good job of leveraging its assets for the benefit of the regional economy. The institutions don't produce the "value added" impact that might be expected and may be seen at its sister institution, UMass Worcester. UMass Amherst seems poised to increase its involvement in local issues and is trying to improve its ability to be a corporate incubator for the region. Recent investments in UMass and Pioneer Valley Life Sciences Institute should provide a foundation for seeding a Life Sciences cluster in the Pioneer Valley, given the significant state investment opportunities created by the Life Sciences Act.

The Knowledge Corridor – The "Knowledge Corridor" connects the Pioneer Valley region with Hartford and Windham counties in Connecticut. This historic interstate region makes some intuitive sense. A river bisects the Corridor and I-91 runs through it. The region has excellent infrastructure links with the broader nation, a highly educated populace, and combined population larger than Raleigh-Durham for example. The challenge is to make the Knowledge Corridor concept something more than its current function as a marketing and promotions platform. Economic development leaders from Connecticut and Massachusetts should evaluate the means of developing a more robust and sustainable cross-state partnership.

Pioneer Valley Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Actions for Pioneer Valley

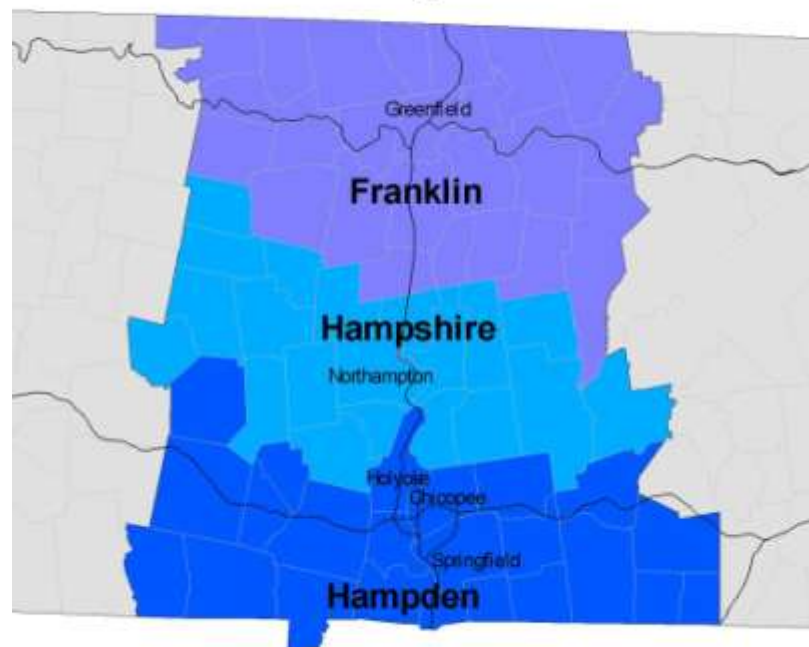
Priority Projects of Regional Significance

Springfield Growth District and implementation of the Springfield Partnership – There are a series of major projects designed to transform the private development capacity and economic activity in Springfield. Springfield is a major population and job center in the region and is home to many of the Pioneer Valley's leading employers in Healthcare, Financial Services and Manufacturing. Springfield's success, combined with similar efforts in Chicopee and Holyoke and a serious commitment by UMass Amherst to economic development, are the keys to regional prosperity.

Westover Municipal Airport – The region needs improved connections, particularly for business travel, that can be accommodated at Westover Municipal Airport. The local perspective is that Skybus proved the viability of passenger service to the Westover Airport in Chicopee. In approximately 9 months, Skybus flew 65,000 people into or out of the airport. Load factors rose steadily during the time period and Skybus was happy enough with the results to add additional service and planned to start originating flights from the facility until sudden bankruptcy intervened. Given the economic slowdown that is hammering the airline industry, development of the regional airport is likely to be a long-range initiative.

Regional Rail – there is significant need to improve regional connectivity, and the development of regional rail to Connecticut is envisioned as means of strengthening the economic connections between Hartford and Springfield. In the long term, rail improvements can link Holyoke, Northampton and Greenfield along a Connecticut River alignment. As part of federal passenger rail improvements to the Northeast corridor, preliminary analysis and planning should be conducted for a Boston to Springfield rail connection.

Pioneer Valley Region and Subregions



Source: MassGIS, UMass Donahue Institute



Key Actions for Pioneer Valley

Priority Projects of Regional Significance

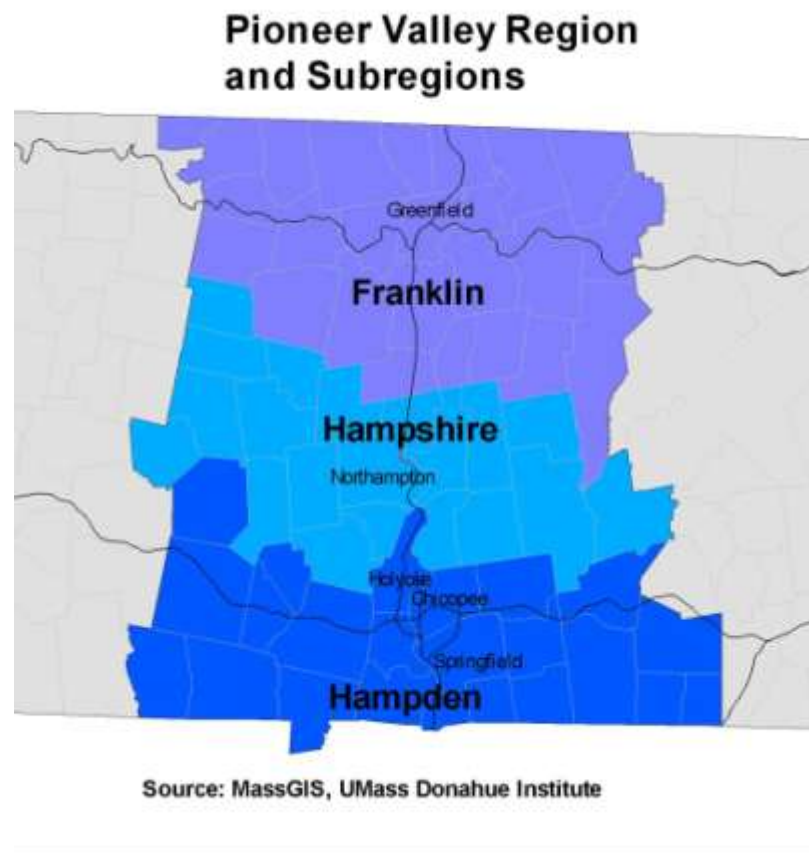
Development of Chicopee Growth District

Bankers Row and Downtown Redevelopment in Greenfield

Satellite Community College Facility in Northampton

Continued Development of Village Hill in Northampton

Development of the Canal Walk and related redevelopment projects in Holyoke



Regional Snapshot for Pioneer Valley

LEADING INDUSTRIES, 2007

Healthcare, representing 17.1% of regional employment

Education, representing 14.2% of regional employment

Retail, representing 12.0% of regional employment

EMPLOYMENT TRENDS, 2001-2006

Trends in Export-oriented Industries:

- Education and Healthcare are fastest growing at 9.0% each.
- Manufacturing is in decline, losing just over 21%
- Despite this loss, Manufacturing remains just behind Retail as the fourth largest sector (11%)

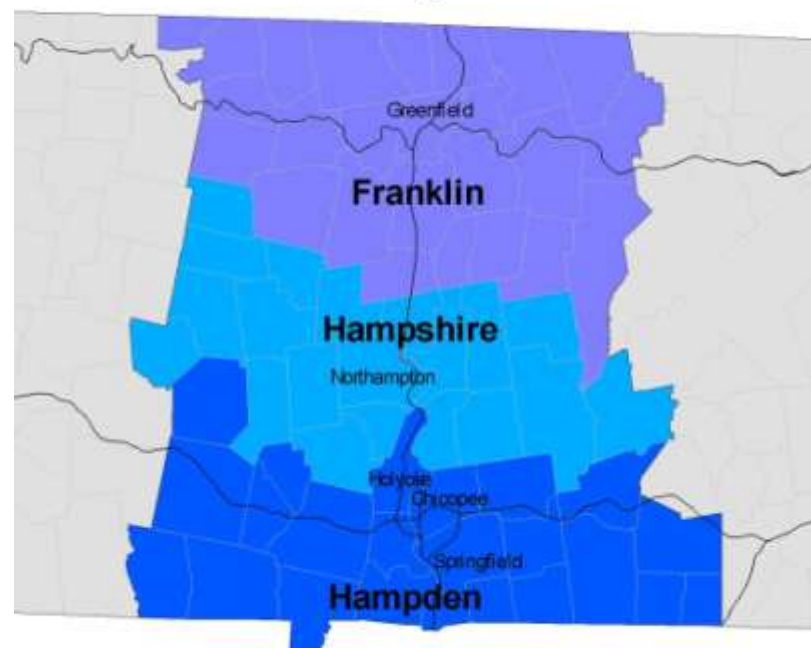
Trends in Locally-serving Industries:

- Education and Healthcare remain are fastest growing
- IT lost over 23% of its workforce
- Financial Services and Professional & Technical Services both saw a serious decline of over 8.0%

HOUSING TRENDS, 2000-2006

- The region had 10.6% of all households in 2006, representing a 0.1% decline since 2000.
- There was a 0.4% decline in homeownership and a 0.9 increase in renters.
- Family households declined by 0.2%.

Pioneer Valley Region and Subregions



Source: MassGIS, UMass Donahue Institute



Innovative Capacity for Pioneer Valley

NIH AWARDS, 2006

- 82 Awards to totaling \$19,692,026
- 4 institutions received NIH funding
- University of Massachusetts Amherst was the largest recipient with \$17,914,891

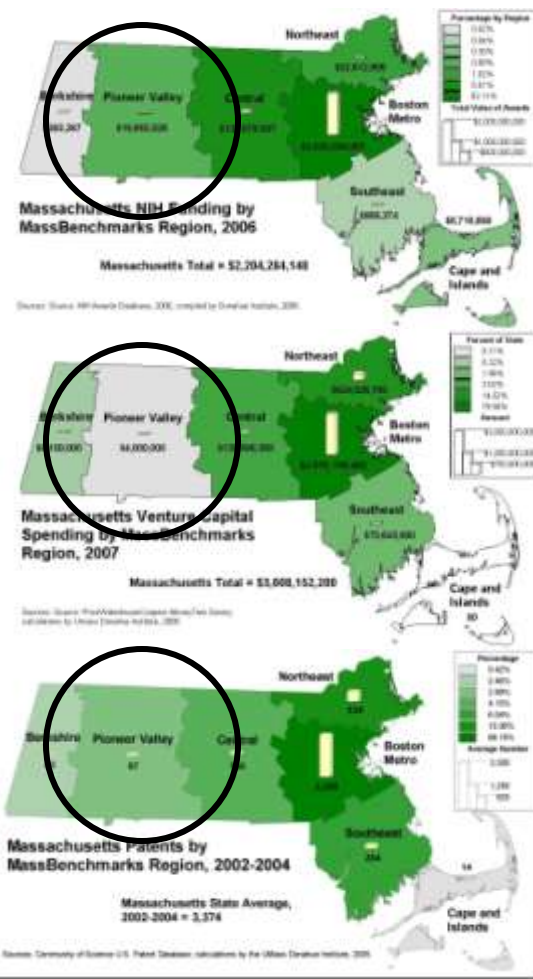
VENTURE CAPITAL FUNDING, 2006

- \$4,000,000 or 0.11% of all VC funding in Massachusetts went to firms in this region
- Software was the only industry receiving VC funding

PATENTS, 1973-2004

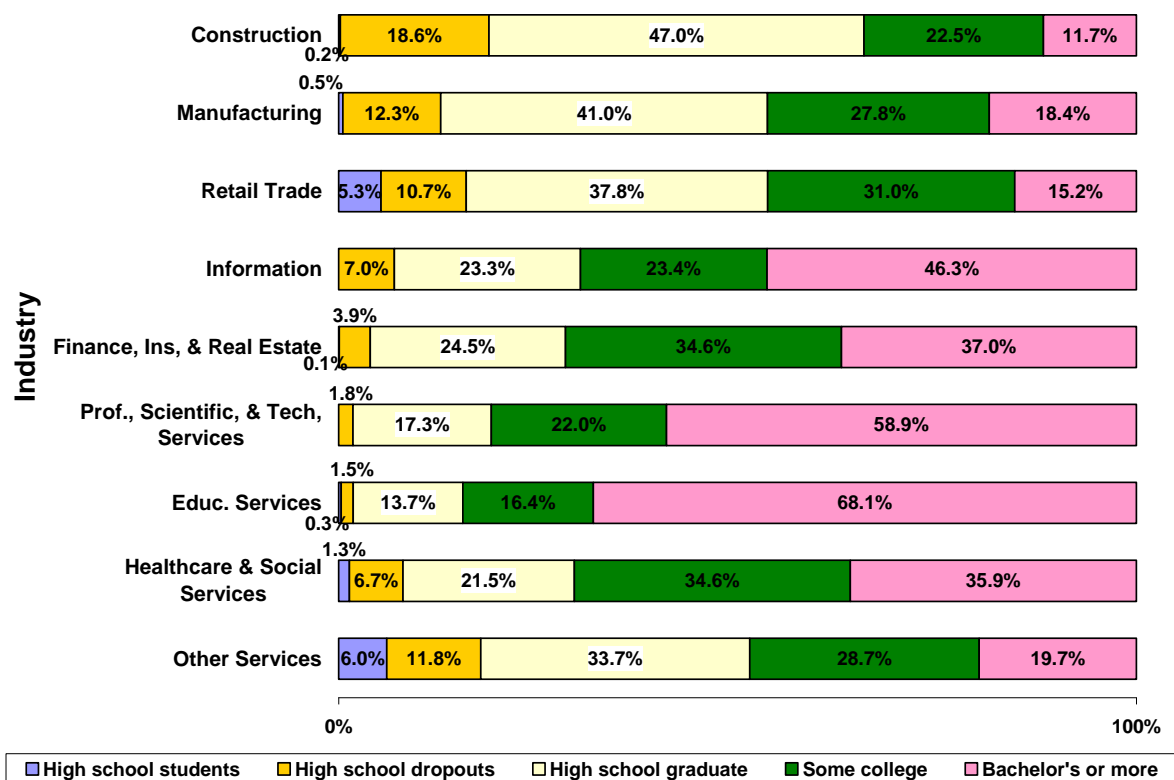
	1971-1973	2002-2004
State Total	1,130	3,374
Pioneer Valley	35	97

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Educational Attainment for Hampden WIB

DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006

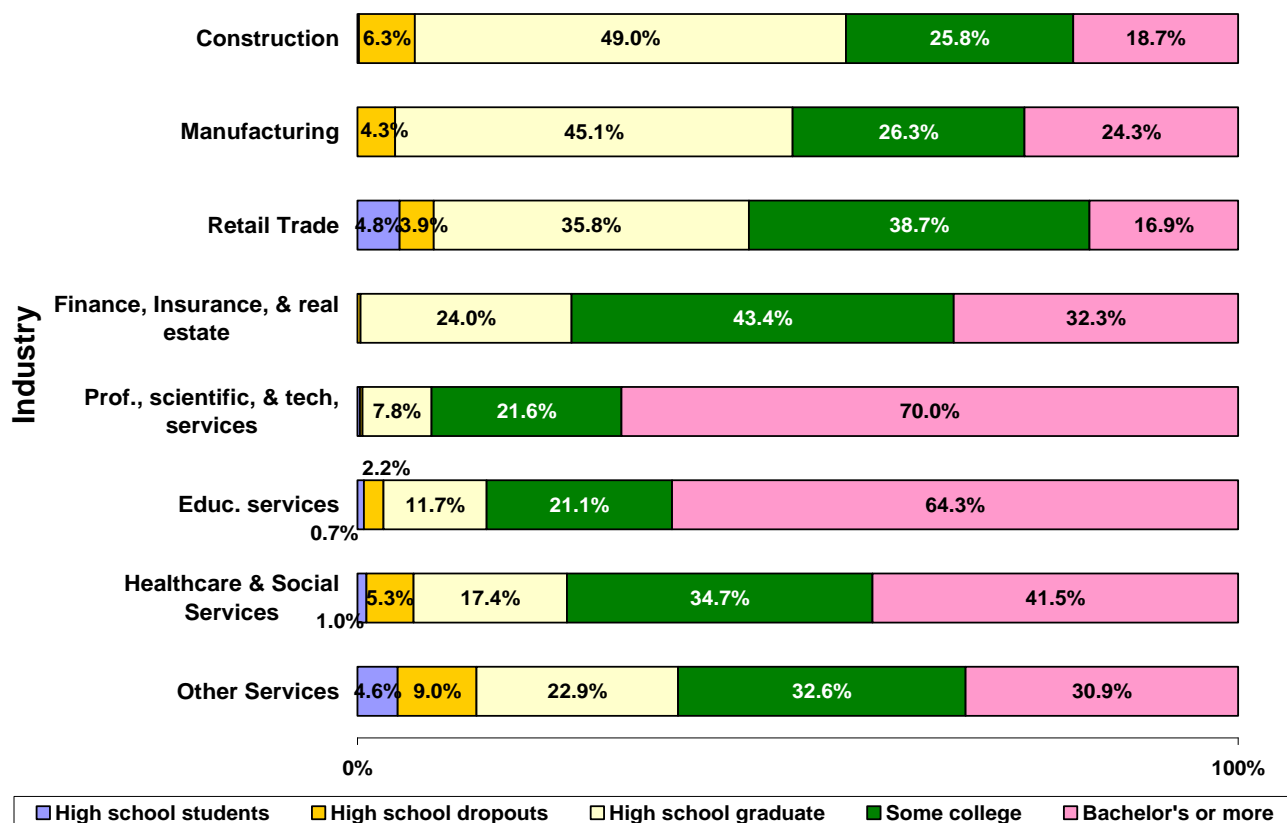


Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Educational Attainment for Hampshire/Franklin WIB

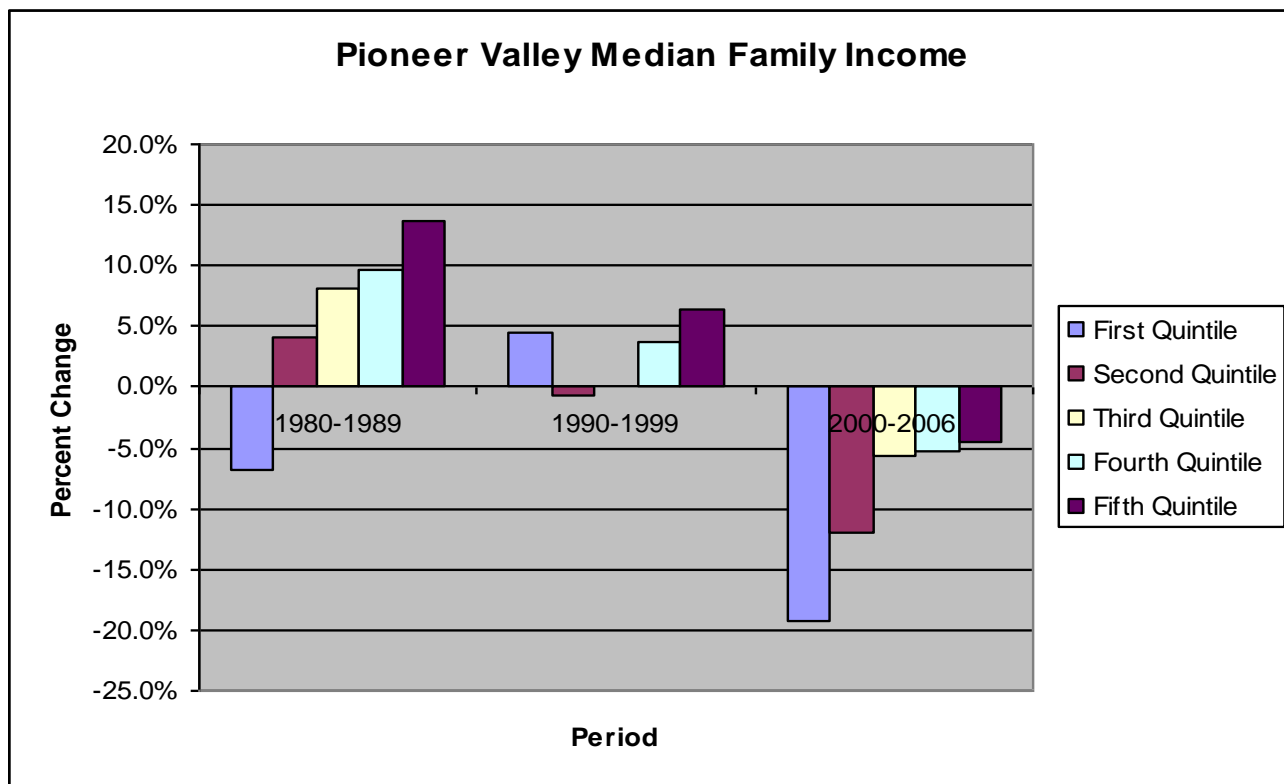
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Growing Inequality in the Pioneer Valley, 1979-2006



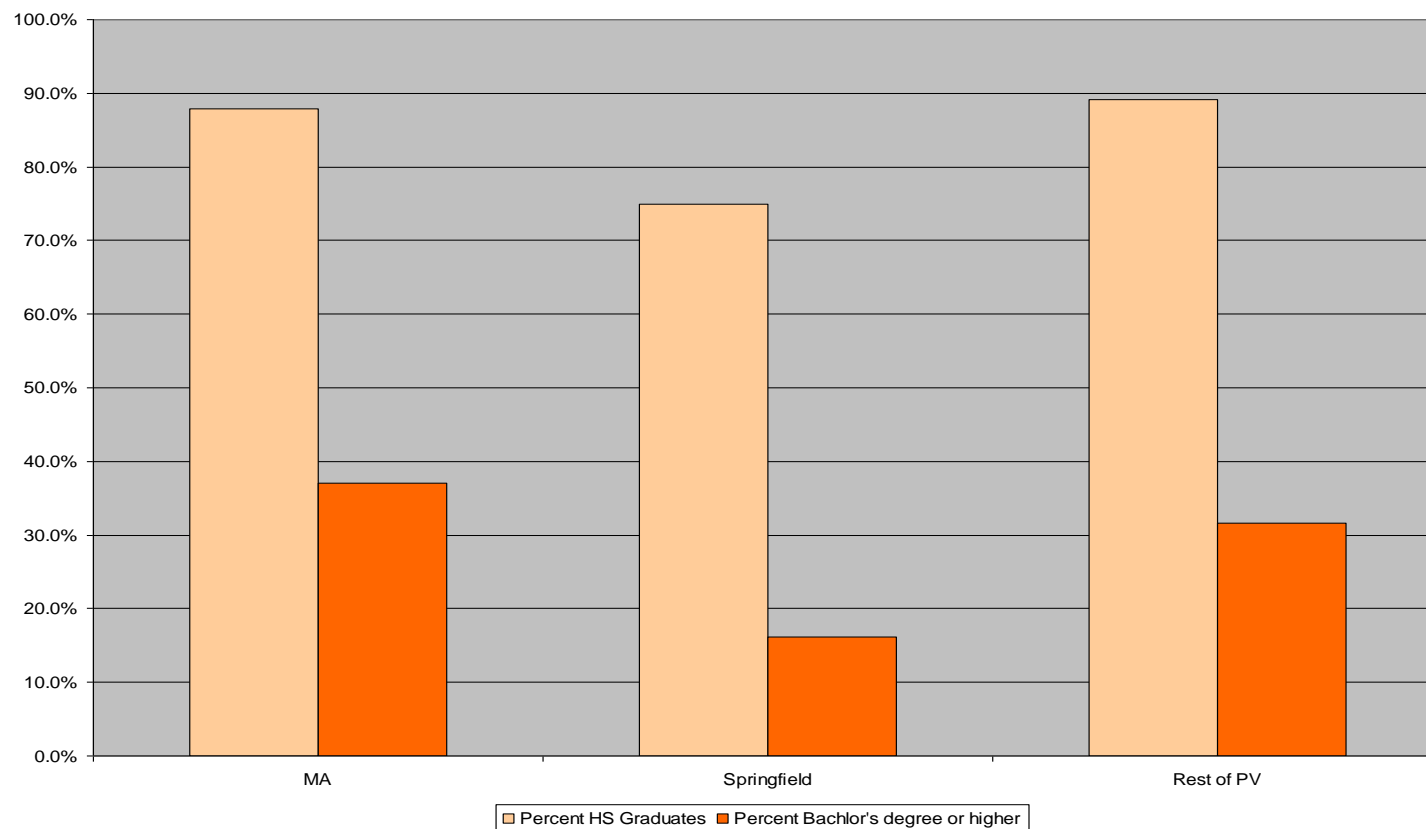
Analysis - Income growth was fairly evenly distributed during the 1980s, except for the lowest quintile which experienced a decline. In the 1990s, income growth was mixed with the bottom and top quintiles growing with the middle quintiles were essentially stagnant.. All sectors declined in the 2000s, with the lowest two quintiles experience significant decline.

Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.



Educational Attainment in the Pioneer Valley

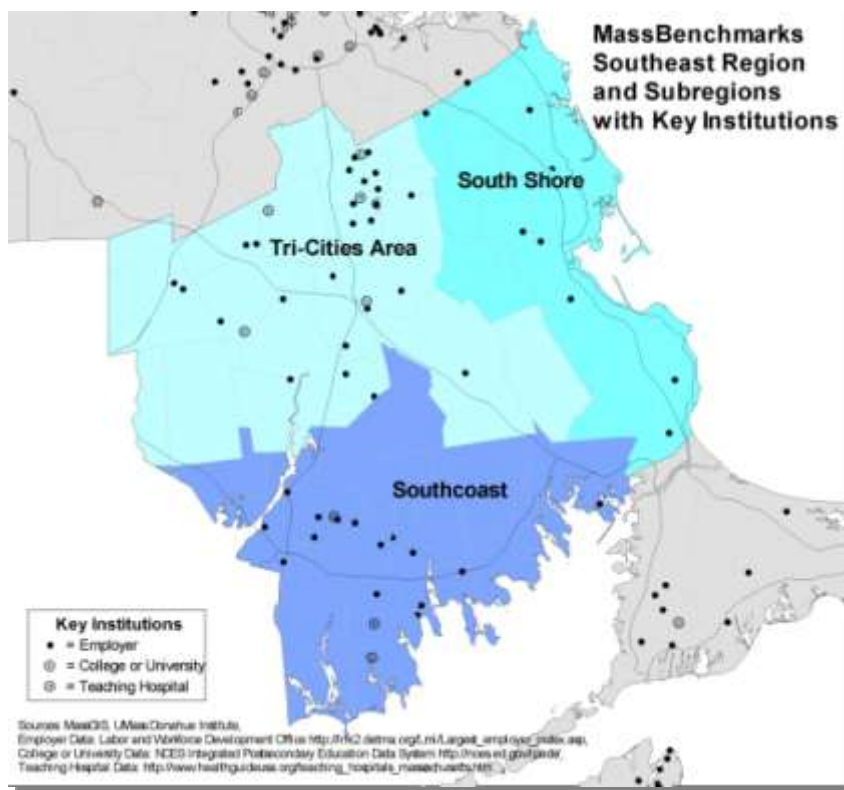
EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006



Source: U.S. Bureau of the Census, 2006 ACS.



Regional Profile Southeast Region



REGIONAL MUNICIPALITIES BY RPA

Old Colony Planning Council:

Abington, Avon, Bridgewater, Brockton, East Bridgewater, Easton, Halifax, Hanson, Kingston, Pembroke, Plymouth, Plympton, Stoughton, West Bridgewater, Whitman

Southeast Regional Planning and Economic Development District (SRPEDD):

Acushnet, Attleboro, Berkley, Carver, Dartmouth, Dighton, Fairhaven, Fall River, Freetown, Lakeville, Mansfield, Marion, Mattapoisett, Middleborough, New Bedford, No. Attleborough, Norton, Plainville, Raynham, Rehoboth, Rochester, Seekonk, Somerset, Swansea, Taunton, Wareham, Westport

Metropolitan Area Planning Council:

Duxbury, Hanover, Marshfield, Norwell, Pembroke, Rockland, Scituate

Representative Key Institutions and Employers

Stonehill College
UMass-Dartmouth
Wheaton College
A & K New York Discount
Caritas Good Samaritan Med Center
De Puy Inc
Gray Restoration Inc
Invensys Process Systems
Jordan Hospital
Mitsubishi Lithographic
Morton Hospital & Medical Center
Samsonite Corporation
Sensata Technologies Inc
Southcoast Health System
VA Boston Healthcare System
W B Mason Co
Wearguard-Crest



Regional Snapshot for Southeast

ANALYSIS, Regional Economy

The economy of the region is composed mainly of locally-serving industries, including healthcare. The region has experienced population growth between 2000 and 2007, with the notable exception of New Bedford. There is an increase in retail industries associated with this population growth. Construction jobs increased by almost sixteen percent during this period. Manufacturing remains an important share of regional employment despite suffering serious decline. Two exceptions of this decline are Food Manufacturing and Wood Product Manufacturing, both of which experienced healthy job gains.

Leisure & Hospitality is an important sector, representing over ten percent of regional employment and growing at over eleven percent since 2001. Healthcare, the region's largest employing sector, grew strongly during this period. Education is another important sector which represents 8.4% of regional employment with growth of 11.3%. Financial Services growth has been strong (18.7%), but recently has experienced a decline (1.4% since 2006). Professional & Technical Services grew at nearly five percent, but has declined by almost 2.5% since 2006.

The institutional connections to the knowledge economy are problematic, despite substantial leadership and growth at UMass campus Dartmouth. The region received just under two percent of all venture capital spending in the state, and almost no NIH funding. Only three firms received NIH funding with the largest award, just under half a million dollars, going to a software company. State strategic planning and assistance to support the continued growth and success of UMass Dartmouth is critical to long-term development of the region.



Key Implications for Southeast

Cross-Cutting Issues

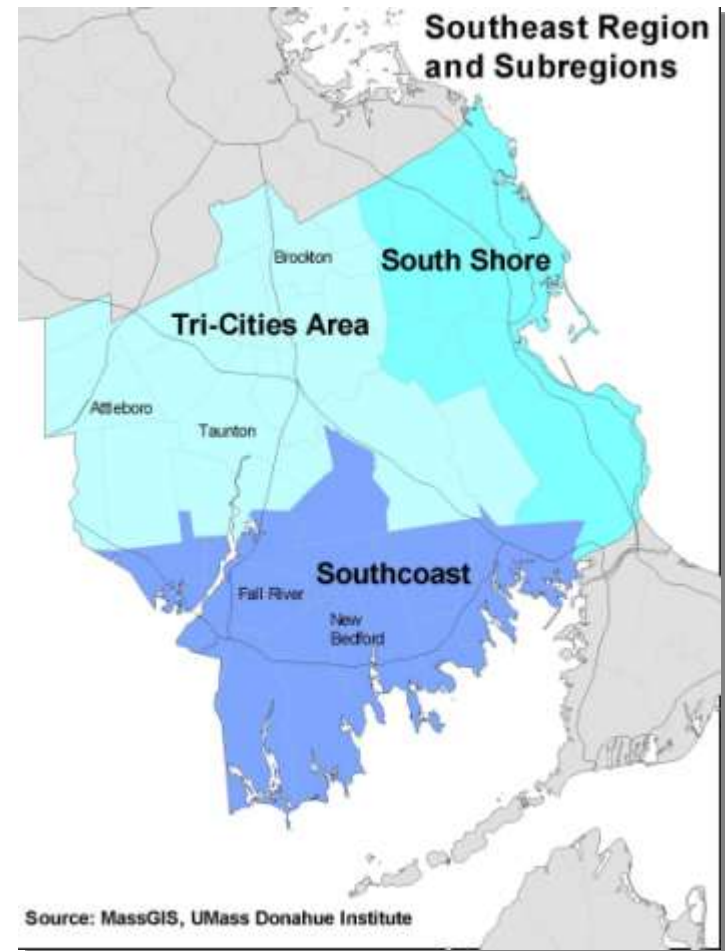
Scale of Programs: Smaller municipalities in this region expressed concern that state programs require a level of staff capacity that they are unable to maintain. This prevents access to a number of state programs.

Rural/Agricultural Policy: The region is still a productive farming region. Current efforts focus on land preservation (due to the pressure from residential growth) and small business support for farmers.

Broadband: There are a number of areas underserved in the region, including rural communities in Plymouth County, Fall River, and some adjacent municipalities in Bristol County.

Workforce Development: This is a primary issue for the cities in the region. Workforce programs are not well-aligned with growth occupations. There is a large population of adult workers who require adult basic education training and improved language skills.

Education Attainment: The region's educational attainment in the urban areas is very low, by state standards. Less than ten percent of New Bedford residents have a college degree and the attrition rate at New Bedford High School is 40%. A classic de-industrial cycle is at work in the city. Manufacturing jobs decline due to macroeconomic reasons, leaving behind only those jobs requiring high educational attainment (or poverty wage service sector jobs). With no family experience of schooling to high attainment, the workforce is unprepared for the remaining jobs (or cannot afford to live on the service sector jobs). Industry then leaves or refuses to locate in an area that cannot supply a proper workforce or its needs (leaving the poverty wage service sector jobs as the only viable employment option).



Key Implications for Southeast

Region-specific Issues

Strong Fishing Industry – Thanks to scalloping, New Bedford is one of the highest price yield fishing ports in the country. Management of scallop beds is an important issue for maintaining this industry. New Bedford's waterfront is confronting capacity issues related to its revitalized fishing industry.

Emerging Creative Economy – New Bedford is beginning to look at building on cultural and historical amenities to attract a creative class to live in the downtown. They have the UMass visual arts center and the whaling museum, a historical district, and are hoping to generate loft redevelopment of certain mill buildings. Plymouth may soon be home to a major film production studio – which can be a regional anchor to the state's growing film industry.

Rapid Residential Growth – The region added 27,000 new single-family homes between 1995-2005 – more than any other region; however growth in the cities remained flat during this time. Residential growth has not spurred industrial growth. Additionally, residential growth has primarily been in areas lacking fixed transit, the employment centers are beginning to move to the suburbs (specifically health care), and commuters are leaving the region for work – all place strain on existing transportation capacity.

Mixed Affordable Housing – 7.1% of units qualify as affordable, concentrated in the urban areas and home prices are generally lower than the Metro Boston region; however, middle income earners face higher housing costs than rest of state.

Foreclosures – Brockton is one of the hardest hit communities in the state; foreclosure initiatives are critical to stabilize the region's cities, as they implement long-term workforce and economic development strategies.



Key Implications for Southeast

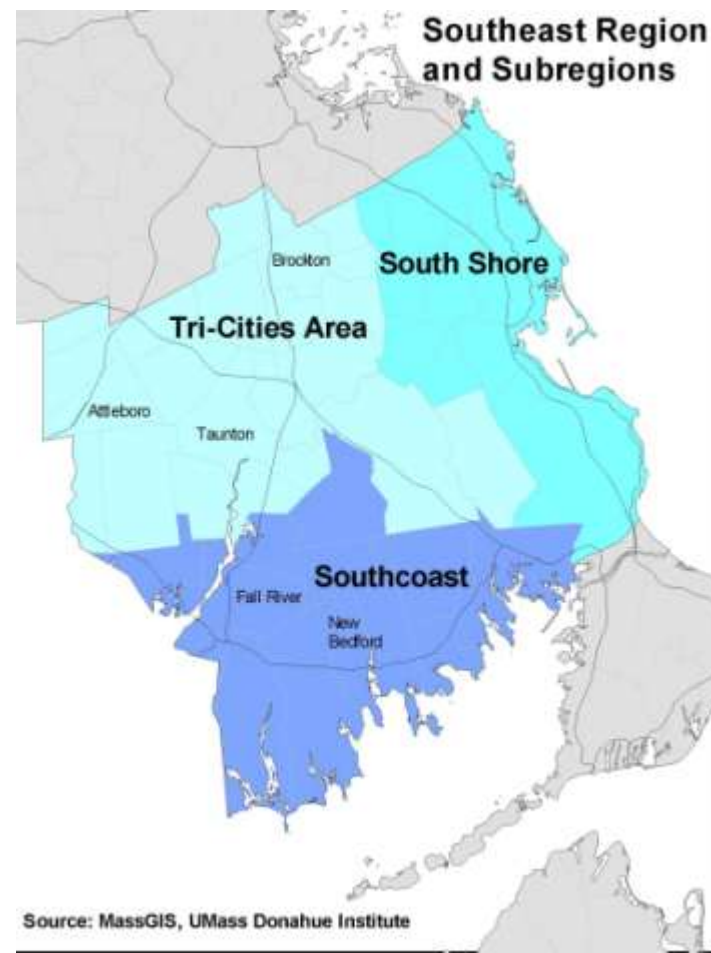
Region-specific Issues

Enhanced Research Capacity and Institutional Collaboration – The Southeast region does not have a significant base in the knowledge economy and innovation despite major nearby institutions such as MBL and WHOI and noteworthy accomplishments and growth at UMass Dartmouth. Enhancement of UMass Dartmouth and incentives for cross-institutional collaboration is essential for the growth of emerging clusters in Southeast Massachusetts.

Urban-oriented incentives, such as Tax Credits – The region's cities are intensely interested in redevelopment incentives that can support market-rate development and provide additional incentives to support competition for business expansion. It's difficult to raise money for a redevelopment project in New Bedford or Fall River. Developers have expressed interest, but can't market the risk to investors. Regional leaders are particularly interested in redevelopment tax credits to develop market-rate housing as the urban areas feel that they are already contributing their fair share of affordable housing. The current TIF program is open to so many communities and industries that it does not provide any competitive advantage to economically distressed areas, such as the region's cities.

Significant Out-Commuting – The data indicates that there are a significant number of commuters who live in the Southeast and commute out of the region for work. Recent studies by the Old Colony Planning Council and the UMass Donahue Institute confirm this trend. The presence of an educated, employed population of commuters is an opportunity for businesses moving into the region, as they may attract workers to stay closer to home.

Municipal Funding the need for Regionalization – Echoing other regions, the Southeast mentioned that fiscal pressures drive land-use decisions and promoting competition between communities .



Key Actions for Southeast

Priority Projects of Regional Significance

South Coast Rail – South Coast Rail is a critically important connection to the future of the region's economy. The proposed rail connection from Boston to New Bedford and Fall River would create significant mobility improvements and better link employment centers and residential locations. The project is foundational to regional economic development efforts: efforts to improve educational outcomes, urban regeneration and export-oriented cluster development are the other elements that will make the rail investments worthwhile.

Attleboro Industrial Park

Attleboro Mixed-use inter-modal facility

Freetown/Fall River interchange and executive office park

UMass Dartmouth Bio-Processing Center

New Bedford Growth District and Hicks, Logan, Sawyer waterfront development plan

New Bedford Business Park Expansion

Taunton, Liberty, and Union Industrial Park

Taunton Interchange reconstruction at Rt.24 and 140

Taunton, Myles Standish Industrial Park



Regional Snapshot for Southeast

LEADING INDUSTRIES, 2007

- Healthcare, representing 15.6% of regional employment
- Retail, representing 15.4% of regional employment
- Manufacturing, representing 11.4% of regional employment

EMPLOYMENT TRENDS, 2001-2006

Trends in Export-oriented Industries:

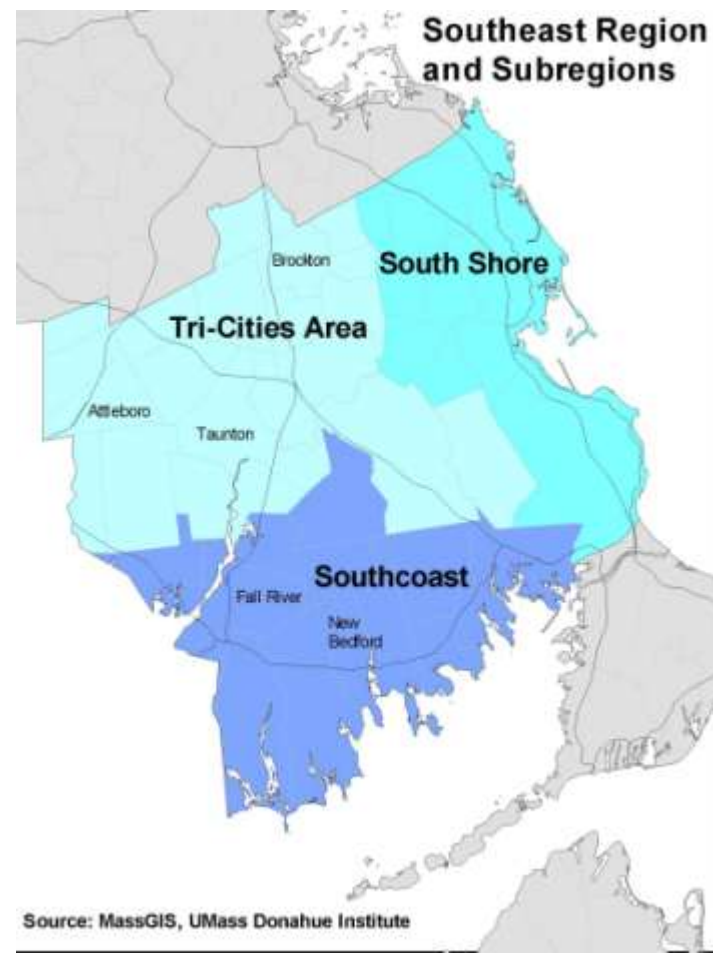
- Manufacturing is in decline, losing almost 23% of workforce
- Leisure & Hospitality is strong, representing 10.6% of regional employment with growth of 11.3%.

Trends in Locally-serving Industries:

- Construction grew at 15.8% and Healthcare grew at 15.7%
- Education is strong, representing 8.4% of regional employment with growth of 11.3%.
- Financial Services growth has been strong (18.7%), but recently has experienced a decline (1.4% since 2006)
- Professional & Technical Services grew at nearly 5.0%, but declined by almost 2.5% since 2006.

HOUSING TRENDS, 2000-2006

- The region had 15.8% of all households in 2006, which is an increase of 2.2% since 2000.
- There was a 5.4% increase in homeownership and a 4.4% decline in renters.
- Family households increased by 2.2%.



Innovative Capacity for Southeast

NIH AWARDS, 2006

- 4 Awards to totaling \$955,374
- 3 institutions received NIH funding
- Bock to the Future, Inc. was the largest recipient with \$487,714 (developer of software to help people quit smoking)

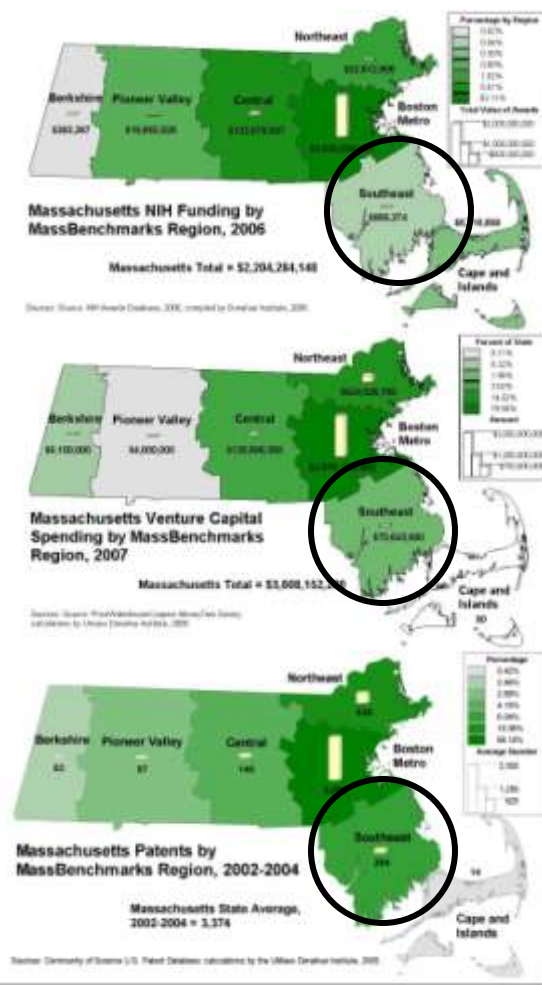
VENTURE CAPITAL FUNDING, 2006

- \$70,643,800 or 1.96% of all VC funding in Massachusetts went to firms in this region
- The largest industries receiving VC funding were
 - Medical Devices and Equipment, with 55.87%
 - Retailing/Distribution, with 33.97%

PATENTS, 1973-2004

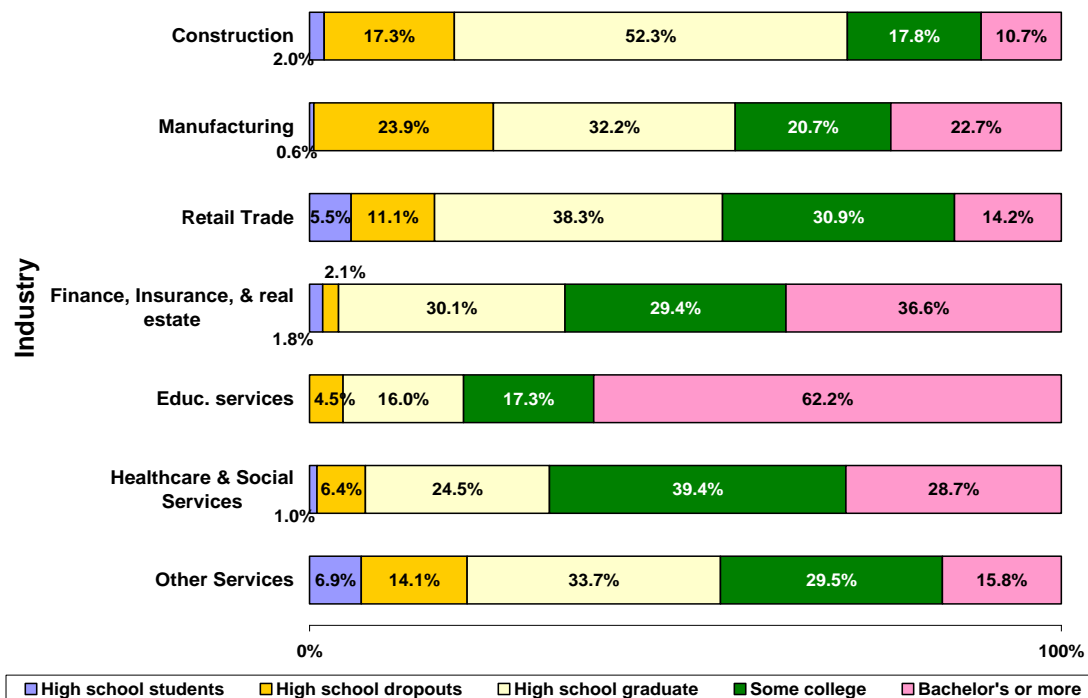
	1971-1973	2002-2004
State Total	1,130	3,374
Southeast	31	204

Source: Community of Science U.S. Patent Database; calculations by the UMass Donahue Institute, 2005.



Educational Attainment for Bristol WIB

DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006

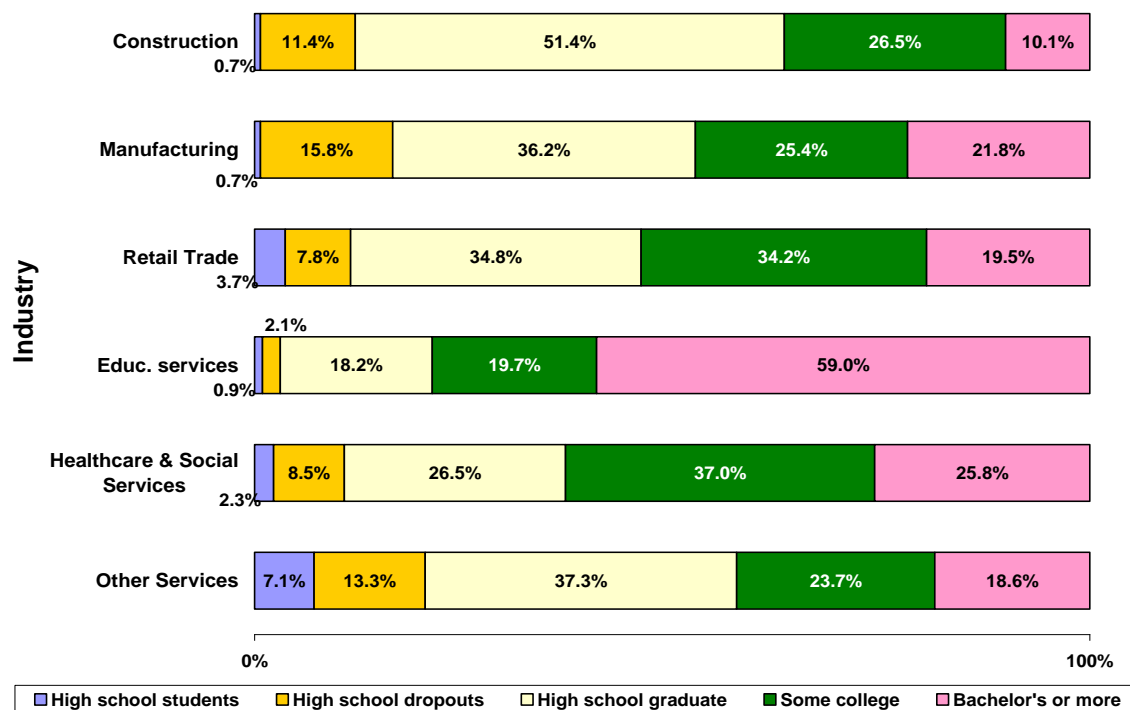


Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Educational Attainment for Brockton WIB

DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006

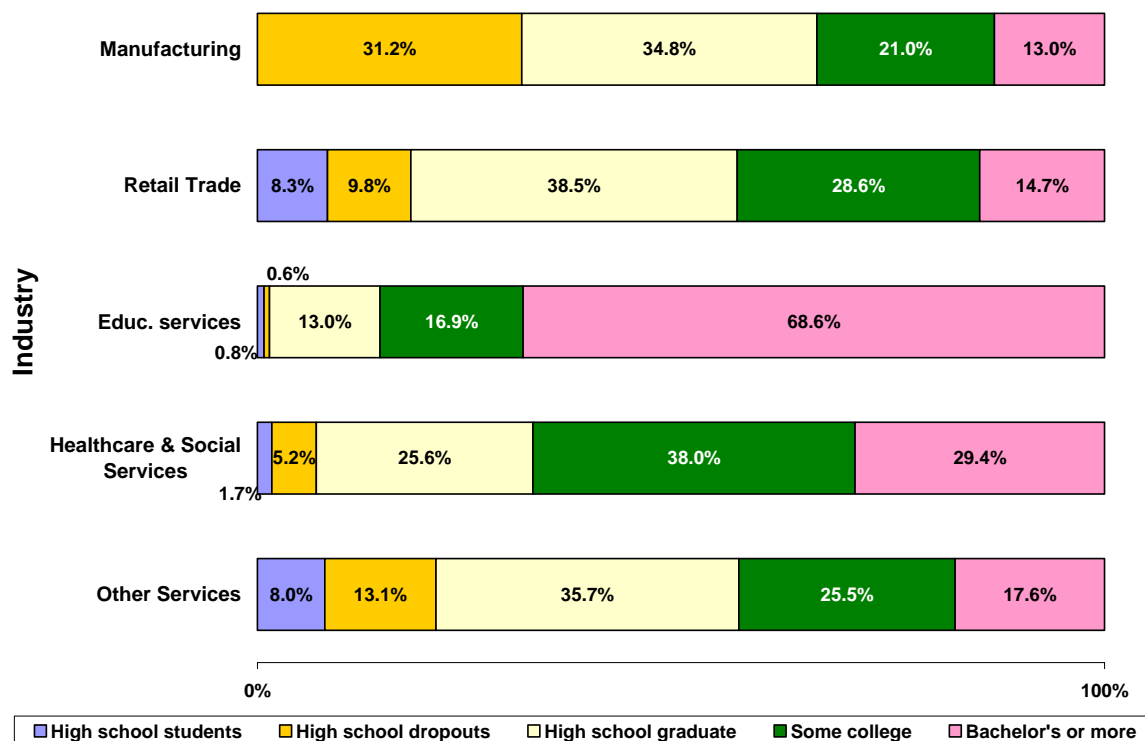


Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Educational Attainment for New Bedford WIB

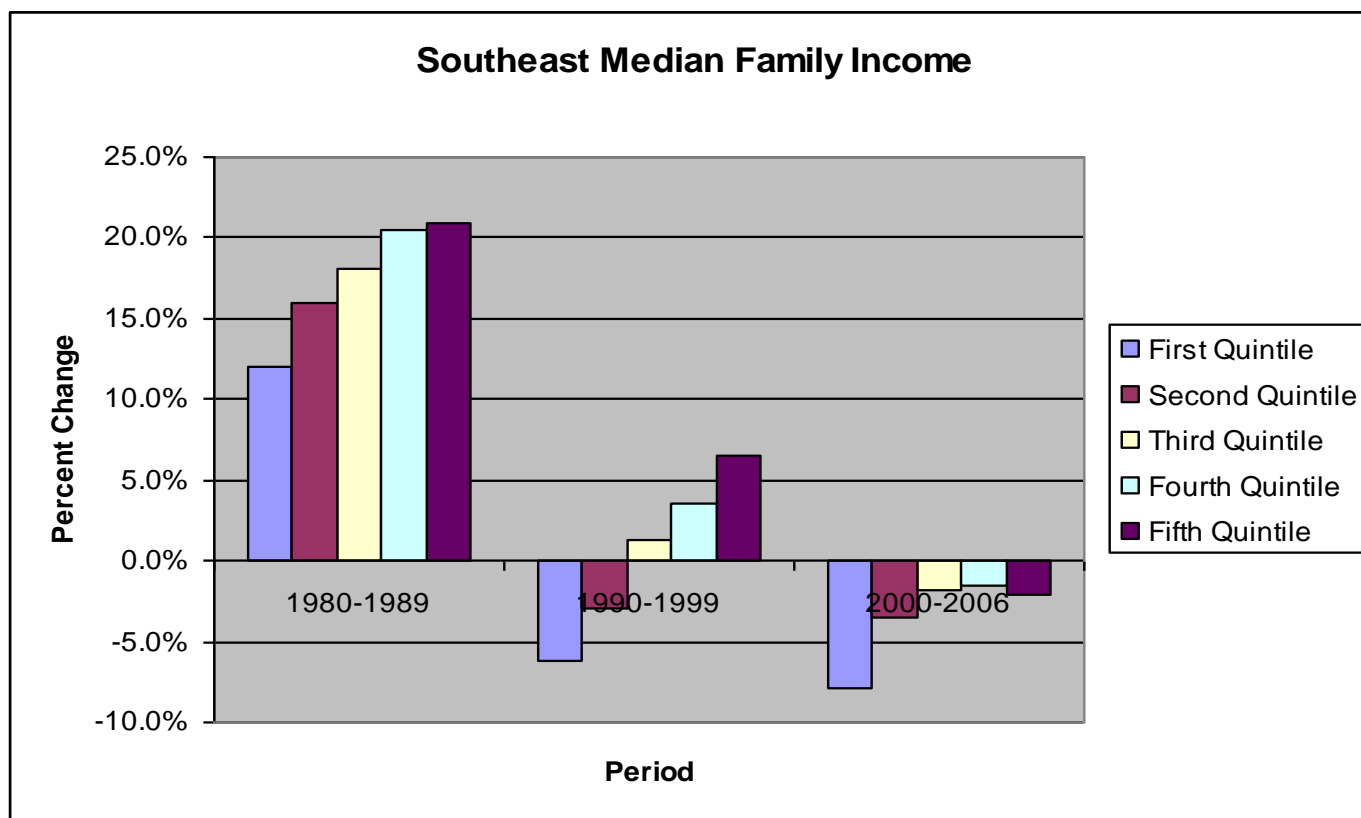
DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY INDUSTRY, 2006



Source: 2005, 2006 ACS; Center for Labor Market Studies, Northeastern University; after Paul Harrington.



Growing Inequality in the Southeast Region, 1979-2006



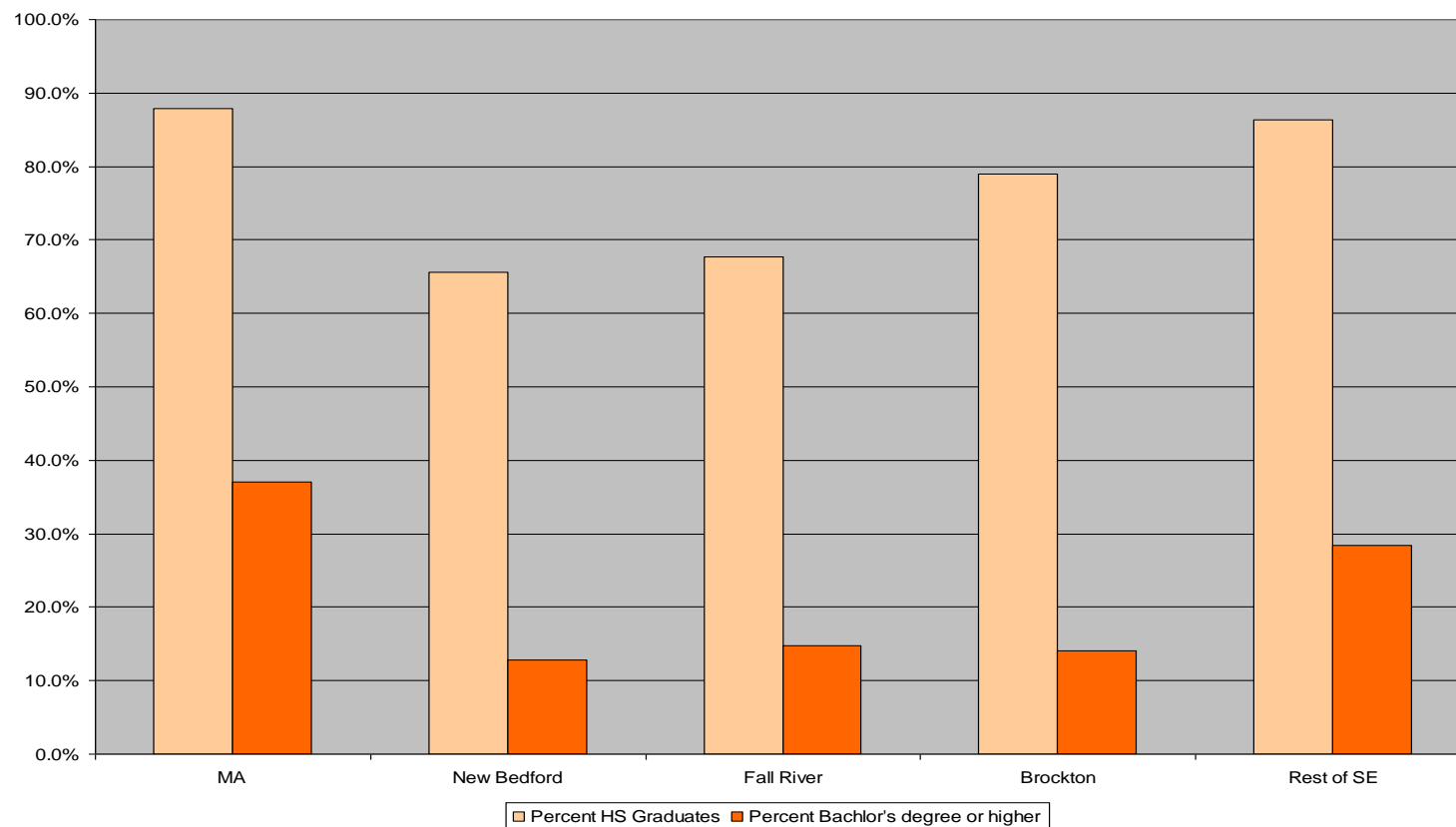
Analysis - Income growth was fairly evenly distributed during the 1980s. In the 1990s, income growth slowed and the bottom two quintiles experienced loss. All sectors declined in the 2000s.

Source: U.S. Bureau of the Census, PUMS. Graphic by UMass Donahue Institute.



Educational Attainment in Southeast

EDUCATIONAL ATTAINMENT OF PERSONS 25 AND OLDER, 2006



Source: U.S. Bureau of the Census, 2006 ACS.

